



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



Educ 3850.5



Harvard College Library

FROM

Pres C. W. Eliot











*Final* *June 28 1865*

REPORT  
OF  
THE ROYAL COMMISSIONERS  
APPOINTED TO INQUIRE INTO THE  
UNIVERSITIES OF SCOTLAND,  
WITH  
EVIDENCE AND APPENDIX.

VOLUME I.

REPORT WITH INDEX OF EVIDENCE.

---

Presented to both Houses of Parliament by Command of Her Majesty.

---



GLASGOW:  
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE  
BY MURRAY AND GIBB.

1865.



REPORT  
OF  
THE ROYAL COMMISSIONERS  
APPOINTED TO INQUIRE INTO THE  
Commission  
- UNIVERSITIES OF SCOTLAND,  
WITH  
EVIDENCE AND APPENDIX.

VOLUME I.  
REPORT WITH INDEX OF EVIDENCE.

---

*Presented to both Houses of Parliament by Command of Her Majesty.*

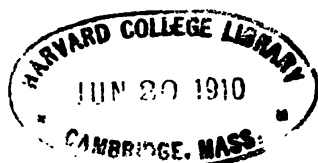
---



EDINBURGH:  
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE  
BY MURRAY AND GIBB.  
1878.

151.8-434

Educ 3850.5



Pres. C. W. Eliot

(Vol. i-iv)

BOUND FEB 13 1911

# CONTENTS.

---

|   |          |
|---|----------|
| COMMISSION, . . . . .   | AGE<br>v |
| REPORT—Introductory, . . . . .  | 1        |
| Present Constitution of the Universities, . . . . .   | 2        |
| Constitution and Powers of the University Court, . . . . .  | 8        |
| Functions of the General Council, . . . . .   | 18       |
| Graduation in Arts, . . . . .   | 23       |
| Graduation in Medicine, . . . . .   | 30       |
| Graduation in Law, . . . . .  | 36       |
| Graduation in Divinity, . . . . .   | 38       |
| Expediency of Instituting any New Faculties or Degrees, . . . . .   | 39       |
| Institution or Continuance of Entrance Examinations, . . . . .  | 43       |
| Creation of New Professorships or Lectureships, . . . . .   | 51       |
| Provision of Assistance and Apparatus for any Present or Future<br>Professors or Lecturers, . . . . .   | 68       |
| Length of the University Sessions, and the Expediency of Intro-<br>ducing any Changes in respect to these, . . . . .                                | 74       |
| The Recognition of Extra-Mural Teaching, and the Conditions<br>under which such Teaching should be recognised, . . . . .                            | 78       |
| Regulations as to Time, Place, Right, and Manner of Presenting<br>and Electing all University Officers, . . . . .                                   | 85       |
| The Emoluments and Retiring Allowances of Principals, Pro-<br>fessors, and Lecturers, . . . . .   | 96       |
| The Mode of Appointment to Bursaries, Scholarships, Fellowships,<br>and other similar Foundations, and the Conditions of their<br>Tenure, . . . . . | 106      |



|  | PAGE |
|--|------|
| The Financial Position of the Universities, and the Administration<br>of their Property and Revenues, . . . . .  | 118  |
| St. Andrews, . . . . .   | 119  |
| Glasgow, . . . . .   | 124  |
| Aberdeen, . . . . .  | 134  |
| Edinburgh, . . . . .   | 139  |
| The Condition of the University Buildings, Libraries, and Museums,<br>and the Provision for their Management, Maintenance, and<br>Extension, . . . . . | 145  |
| Summary of Recommendations, . . . . .  | 152  |
| NOTE BY DR. MUIR, . . . . .  | 165  |
| SUGGESTIONS FOR LAW AND HISTORY SCHOOL BY MR. FROUDE, . . . . .  | 177  |

---

|                              |     |
|------------------------------|-----|
| INDEX OF EVIDENCE, . . . . . | 185 |
|------------------------------|-----|

## SCOTTISH UNIVERSITIES COMMISSION.

---

### VICTORIA R.

---

VICTORIA, by the grace of God, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith:— To our right trusty and well-beloved Councillor JOHN INGLIS, Lord Justice-General and President of the Court of Session in Scotland; our right trusty and right entirely-beloved Cousin and Councillor WALTER FRANCIS, DUKE OF Buccleuch and QUEENSBERRY, Knight of our most noble Order of the Garter; our right trusty and well-beloved Councillor JAMES, BARON MONCREIFF, Lord Justice-Clerk and President of the Second Division of the Court of Session in Scotland; our right trusty and well-beloved Councillor LYON PLAYFAIR, Companion of our most honourable Order of the Bath; our trusty and well-beloved Sir WILLIAM STIRLING-MAXWELL, Baronet; our trusty and well-beloved JAMES CRAUFURD, Esquire, one of the Senators of the College of Justice in Scotland; our trusty and well-beloved WILLIAM WATSON, Doctor of Laws, Dean of the Faculty of Advocates, our Solicitor-General for Scotland; our trusty and well-beloved JOHN MUIR, Doctor of Civil Law; our trusty and well-beloved JAMES ANTHONY FROUDE, Esquire; our trusty and well-beloved ARCHIBALD CAMPBELL SWINTON, Esquire, Doctor of Laws; our trusty and well-beloved THOMAS HENRY HUXLEY, Esquire, Doctor of Laws, Professor of Natural History in the Royal School of Mines; and our trusty and well-beloved JAMES ALEXANDER CAMPBELL, Esquire, Doctor of Laws, Greeting:— WHEREAS WE have deemed it expedient, for divers good causes and considerations, that a Commission should forthwith issue to inquire into various matters connected with the Universities of Scotland:

Now know ye that WE, reposing great trust and confidence in your zeal, ability, and discretion, have authorized and appointed you, the said John Inglis, Walter Francis, Duke of Buccleuch

and Queensberry, James, Baron Moncreiff, Lyon Playfair, Sir William Stirling-Maxwell, James Craufurd, William Watson, John Muir, James Anthony Froude, Archibald Campbell Swinton, Thomas Henry Huxley, and James Alexander Campbell, or any three or more of you, to make diligent and full inquiry into the following matters in each of the Universities of Scotland, viz.: The constitution and powers of the University Court; the functions of the General Council; the course of study and regulations for graduation in the faculties of Arts, Medicine, Law, and Divinity; the expediency of instituting any new faculties or degrees; the institution or continuance of entrance examinations; the creation of new professorships or lectureships; the provision of assistance and apparatus for any present or future Professors or Lecturers; the length of the University sessions, and the expediency of introducing any changes in respect to these; the recognition of extra-mural teaching, and the conditions under which such teaching should be recognised; regulations as to time, place, right, and manner of presenting and electing all University officers; the emoluments and retiring allowances of Principals, Professors, and Lecturers; the mode of appointment to bursaries, scholarships, fellowships, and other similar foundations, and the conditions of their tenure; the financial position of the Universities, and the administration of their property and revenues; the condition of the University buildings, libraries, and museums, and the provision for their management, maintenance, and extension: And for the better discovery of the truth in the premises, WE DO, by these presents, GIVE and GRANT to you, or any three or more of your number, full power and authority to call before you, or any three or more of your number, the respective Principals, Professors, and all others bearing office in the said Universities, and all such other persons as you shall judge necessary, by whom you may be informed of the truth in the premises, and to inquire of the premises by all other lawful ways and means whatsoever: AND WE DO HEREBY GIVE AND GRANT unto you, or any three or more of you, full power and authority to cause all or any of the persons bearing office in the said Universities, to bring and produce before you, or any three or more of you, all records, orders, books, papers, accounts, or other writings belonging to any of the said Universities, or in the custody of any of the officers within the same: AND our further will and pleasure is that, as soon as the same can conveniently be done (using all diligence), you certify unto us, under the hands and seals of you, or any three or more of you, what you shall have done in the premises: AND WE further will and command that this our Commission shall continue in full force

and virtue, and that you, our said Commissioners, or any three or more of you, shall and may from time to time proceed in the execution thereof, and of every matter and thing therein contained, although the same be not continued from time to time by adjournment: And for your assistance in the due execution of this our Commission, we have made choice of our trusty and well-beloved ROBERT BERRY, Esquire, Advocate, Professor of Roman Law and the Law of Scotland in the University of Glasgow, to be Secretary to this our Commission, and to attend you, whose services and assistance we require you to use from time to time, as occasion may require. IN WITNESS whereof, we have ordered the Seal appointed by the Treaty of Union, to be kept and made use of in place of the Great Seal of Scotland, to be appended hereto. GIVEN at our Court at St. James's the twenty-fourth day of April One thousand eight hundred and seventy-six, and in the thirty-ninth year of our reign.

*Per signaturam manu S.D.N. Reginae supra script.*

Sealed at Edinburgh the fourth day of May One thousand eight hundred and seventy-six.

(L. S.)

COLIN MACKENZIE,  
*Deputy-Keeper of the Seal.*

Written to the Seal and registered the fourth day of May One thousand eight hundred and seventy-six.

(L. S.)

JOHN KIRK,  
*Director of Chancery.*



# SCOTTISH UNIVERSITIES COMMISSION.

## R E P O R T.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

By Your Majesty's Royal Commission, dated the 24th of April 1876, we were authorized and appointed to make diligent and full inquiry into the following matters in each of the Universities of Scotland, viz. :—

1. The constitution and powers of the University Court ;
2. The functions of the General Council ;
3. The course of study and regulations for graduation in the Faculties of Arts, Medicine, Law, and Divinity ;
4. The expediency of instituting any new Faculties or Degrees ;
5. The institution or continuance of Entrance Examinations ;
6. The creation of new Professorships or Lectureships ;
7. The provision of assistance and apparatus for any present or future Professors or Lecturers ;
8. The length of the University Sessions, and the expediency of introducing any changes in respect to these ;
9. The recognition of extra-mural teaching, and the conditions under which such teaching should be recognised ;
10. Regulations as to time, place, right, and manner of presenting and electing all University officers ;
11. The emoluments and retiring allowances of Principals, Professors, and Lecturers ;

*Introductory.*

12. The mode of appointment to Bursaries, Scholarships, Fellowships, and other similar foundations, and the conditions of their tenure ;
13. The financial position of the Universities, and the administration of their property and revenues ;
14. The condition of the University buildings, libraries, and museums, and the provision for their management, maintenance, and extension.

With the view of aiding us in our inquiry into these various matters, we invited the different bodies in each of the Universities—the University Court, the Senatus Academicus, and the General Council—to suggest to us the names of witnesses who might give us the best information. We have held in all ninety-three meetings, and have examined one hundred and twelve witnesses. From many of these we have derived valuable assistance in forming our conclusions. Before, however, we proceed to explain these, it may be well to state shortly the present constitution of the Universities, and the system under which they are governed.

## PRESENT CONSTITUTION OF THE UNIVERSITIES.

Previous to the passing of the Universities (Scotland) Act of 1858, 21 and 22 Vict. cap. 83, there were five Universities in Scotland, viz. the Universities of St. Andrews, Glasgow, and Edinburgh, and the two Universities of King's College and Marischal College of Aberdeen. By that statute the two Universities of Aberdeen were united into one University and College, and the Universities are now four in number,—the University of St. Andrews, founded in the year 1411 ; the University of Glasgow, founded in 1450 ; the University of Aberdeen, dating from the foundation of King's College in 1494 ; and the University of Edinburgh, founded in 1582.

Besides uniting into one University the two Universities of Aberdeen, the Act of 1858 introduced important changes in the constitution and government of all the Universities. The ordinary administration of the affairs of each remained vested, as practically it had previously been in all except Edinburgh, in the hands of the Senatus Academicus, or body of Principal and Professors. In Edinburgh the Act gave to the Senatus Academicus the like functions to those possessed by and left with that body in each of

---

*Introductory.*

---

the other Universities, these having previously been exercised in a great measure by the Magistrates and Council of the city.

The powers of the *Senatus Academicus* are regulated by the 5th section of the Act, which provides that 'the *Senatus Academicus* of each of the said Universities shall consist of the Principal or Principals and whole Professors in each University, and shall possess and exercise the powers heretofore belonging to a *Senatus Academicus*, in so far as the same are not modified or altered by or in pursuance of the provisions of this Act, and shall superintend and regulate the teaching and discipline of the University, and administer its property and revenues, subject to the control and review of the University Court, as hereinafter provided.'

The provision in this section for the case of more than one Principal applies to the University of St. Andrews, in which there are two colleges, the United College of St. Salvator and St. Leonard and St. Mary's College, in each of which there is a Principal; and the *Senatus Academicus* of the University includes the Principals and Professors of both colleges.

While the ordinary government of each of the Universities was vested under the statute in the *Senatus Academicus*, the acts of the *Senatus* were made 'subject to the control and review of the University Court,' a new governing body introduced by the Act.

*University Courts.*

In St. Andrews and in Aberdeen, it was provided that the Court should consist of six members, viz.,—(1) the Rector, an officer elected by the matriculated students; (2) the Principal (or, in St. Andrews, the senior Principal); (3) an Assessor nominated by the Chancellor; (4) an Assessor nominated by the Rector; (5) an Assessor elected by the General Council,—a body to be noticed presently; and (6) an Assessor elected by the *Senatus Academicus*. Four members were declared a quorum; the Rector and his Assessor were to continue in office for three years, and the other Assessors for four years, and no Principal or Professor was to be eligible to the office of Rector or Assessor, except in the case of the Assessor elected by the *Senatus Academicus*.

In the Universities of Glasgow and Edinburgh the constitution of the Court was similar, with, however, certain additional members. In Glasgow, a seventh member was added in the Dean of Faculties, an officer of dignity elected annually by the Senate, and who, under the charter of *Nova Erectio* of 1577 granted by



---

*Introductory.*

---

King James VI. of Scotland, was, along with the Rector and the minister of Glasgow, one of the Visitors of the College previous to the Act of 1858. In Edinburgh, the Court was made to consist of eight, the two additional members being the Lord Provost of Edinburgh for the time being, and an Assessor, nominated by the Magistrates and Council of the city, to hold office for four years. This introduction into the Edinburgh Court of representatives from the municipality may be regarded as a recognition in the new constitution of the share in the government of the University which had previously been exercised by the Town Council.

Both in Glasgow and in Edinburgh the quorum of the University Court was fixed by the Act at five, as compared with four in the other two Universities.

The powers of the University Court of each University were declared by the 12th section of the Act to be as follows, viz. :—

1. To review all decisions of the *Senatus Academicus*, and to be a Court of Appeal from the *Senatus* in every case, except as herein otherwise provided for ;
2. To effect improvements in the internal arrangements of the University, after due communication with the *Senatus Academicus*, and with the sanction of the Chancellor, provided that all such proposed improvements shall be submitted to the University Council for their consideration ;
3. To require due attention on the part of the Professors to regulations as to the mode of teaching and other duties imposed upon the Professors ;
4. To fix and regulate from time to time the fees in the several classes ;
5. Upon sufficient cause shown, and after due investigation, to censure a Principal or Professor, or to suspend him from his office and from the emoluments thereof in whole or in part for any period not exceeding one year, or to require him to retire from his office on a retiring allowance, or to deprive him of his office ; and during the suspension of any Professor, to make due provision for the teaching of his class : Provided always that no such sentence of censure, suspension, or deprivation, or requisition on a Professor to retire from office, shall have any effect until it has been approved by Her Majesty in Council ;
6. To inquire into and control the administration of the *Senatus Academicus* or Principal and Professors of any college of

---

*Introductory.*

---

the revenue, expenditure, and all the pecuniary concerns of the University, and of any college therein, including funds mortified for bursaries and other purposes.

The Court had also transferred to them by the 13th section the right of nomination to any professorships exercised at the time of the Act by the Senatus or by one or more of the Professors therein.

The Act had appointed Commissioners for a limited period, with extensive powers for regulating various matters in the different Universities by Ordinances to be made by them, which should be effectual on receiving the approbation of Your Majesty in Council. With reference to these Ordinances, important powers of alteration were given by the Act to the University Courts. By the 19th section it was provided that any of the Ordinances passed by the Commissioners 'may at any time after the expiration of the powers herein conferred on the Commissioners, be altered or revoked by the University Court of the University, to which the same are applicable, but only with the consent, expressed in writing, of the Chancellor thereof, and with the approval of Her Majesty in Council.'

*General Councils.*

The General Council, to which reference is made in more than one of these provisions, was a body created by the 6th section in each of the Universities, with the powers and functions specified in the Act. This body was made to consist of the Chancellor, of the members of the University Court, of the Professors, of the Masters of Arts, of Doctors of Medicine who had attended the University for four complete sessions; and also, in consideration, no doubt, of the fact that graduation in the Faculty of Arts had in most of the Universities fallen greatly into disuse, of persons who, although they had not proceeded to a degree, had before a specified date given a certain number of years' attendance at the University. For the future, however, none but graduates were to obtain admission to the Council.

The qualifications thus prescribed by the Universities Act have to some extent been enlarged by the 'Representation of the People' (Scotland) Act, 1868.' Other degrees besides those specified in the former Act had in the interval been introduced, and there was a desire in various quarters to remove from the qualification of medical graduates, as members of the Council, the condition that they should have attended as students for four years at the University. In none of the Universities is so long a period of

---

*Introductory.*

---

attendance at the University granting the degree required for graduation; and in St. Andrews, in particular, the requirement of four years' attendance had practically the effect of excluding all the medical graduates from a qualification, inasmuch as that University does not afford the means of obtaining a complete medical education, and the candidates for graduation all come from other schools. In view of these facts, it was provided by the Legislature in the 28th section of the Act of 1868, that besides the persons qualified under the previous Act, a qualification for the General Council should be possessed by 'all persons on whom the University to which such General Council belongs has, after examination, conferred the degree of Doctor of Medicine, or Doctor of Science, or Bachelor of Divinity, or Bachelor of Laws, or Bachelor of Medicine, or Bachelor of Science, or any other degree that may hereafter be instituted.'

The Act of 1858 had required as a condition of membership in the General Council the payment of an annual registration fee, to be fixed by the Commissioners. The Commissioners had fixed a certain rate of fee accordingly, giving to members at the same time a power of commutation for future payments after the first. By the 30th section of the Act of 1868 this arrangement has been altered, and under it there is a registration fee of twenty shillings, payable by every qualified person on applying for registration; but no further annual or other fee is payable by him for having his name retained on the register. This Act conferred on the General Councils the right of electing members of Parliament for the Universities, one member being assigned to the General Councils of Edinburgh and St. Andrews, and another to those of Glasgow and Aberdeen.

In each of the Universities the Act of 1858 had given to the General Council the right of electing the Chancellor of the University, which had previously, in each of the Universities in which a Chancellor was elected, been exercised by the *Senatus Academicus*. It also conferred on the General Council the right of electing an Assessor as a member of the University Court, who should continue in office for four years. Further, it provided that the Council should assemble twice every year, on days to be fixed by the Commissioners, but subject to alteration from time to time by resolution of the Council, with the approval of the University Court; and it declared that it should be competent to the Council 'to take into their consideration all questions affecting the wellbeing and prosperity of the University, and to make representations from time to time on such questions to the

*Introductory.*

‘University Court, who shall consider the same, and return to the Council their deliverance thereon.’

The Commissioners had been empowered by the Act, subject to its provisions, to regulate, *inter alia*, the powers, jurisdictions, and privileges of all the members or office-bearers in the Universities, as also of the Senatus Academicus, the General Council, and the University Court and their meetings, and also to make regulations as to time, place, and manner of presenting and electing all University officers. Besides several minor regulations applicable to the different Universities, the Commissioners, in exercise of these powers, passed a general Ordinance, No. 11, in which the following provisions are contained :—

‘II. It shall not be in the power of the General Council to adjourn its meetings from either of the stated annual days of meeting to a future day; but it shall be in the power of any meeting to suspend its proceedings from one hour to a later hour of the same day.

‘III. It shall be in the power of the General Council to appoint a committee or committees at one meeting to arrange or prepare business for a future meeting; but it shall not be in the power of the General Council to delegate any of its functions to a committee, or to act by means of a committee.

‘V. On the occurrence of a vacancy in the office of Chancellor, the election of his successor shall take place at the first ordinary meeting of the General Council, which shall take place after the lapse of two months from the occurrence of the vacancy.

‘VI. Whensoever the statutory term of office of the Assessor in the University Court for the General Council is to expire within ten days next after an ordinary half-yearly meeting of the General Council, it shall be lawful for the General Council at the said half-yearly meeting to proceed to the election of an Assessor, who shall enter upon his office at the expiration of the said statutory term of office; and in the event of a vacancy occurring from any cause at any other period, the General Council shall proceed to the election of an Assessor at the next ordinary half-yearly meeting.

‘VII. Provided always that at any meeting of the General Council, at which an election of Chancellor or Assessor shall fall to take place, the General Council shall proceed to such election before entering on any other business.’

The 9th section of the same Ordinance contains minute provisions regulating the election of officers by the General Council by means of voting letters, to which we shall advert afterwards.

### *1. The University Court.*

By the 4th section of the Act, the Rector had been made the ordinary president of the University Court, with a deliberative and a casting vote, but no provision had been made as to who should be the president in the Rector's absence. To meet this case, a clause (section 4) was inserted in the same 11th Ordinance, to the effect that, in the absence of the Rector, the member present who is first mentioned in the enumeration of the members of Court in the Act 'shall preside with a deliberative ' vote only; and in the event of an equality of votes upon any ' question at such meeting, the consideration of the question before ' the University Court shall be adjourned to a day of which due ' notice shall be given to the Rector; and on that day the con- ' sideration of the question so adjourned shall be resumed, and if ' the Rector does not then attend, the member presiding at such ' subsequent meeting shall have both a deliberative and a casting ' vote on that question.'

We have thought it necessary to set out in pretty full detail several of the provisions of this 11th Ordinance, as much of the evidence bearing on those heads of our inquiry which relate to the constitution and powers of the different University bodies, and also the election of University officers, has reference to them.

This leads us to consider the first head of our inquiry, viz. The constitution and powers of the University Court.

### I. THE CONSTITUTION AND POWERS OF THE UNIVERSITY COURT.

With regard to the constitution of the Court, a number of suggestions have been made to us. Some witnesses, including persons of high authority, expressed the opinion that the Court as at present constituted is satisfactory, that it contains a sufficient representation of the different University interests, that there is no occasion for an increase in the number of its members, there being little, if any, difficulty in securing a quorum of the members when necessary, and that any increase in the number would have an injurious tendency, as diminishing the sense of responsibility which the present limitation of the number creates. It was even suggested that, if it be desired to meet any difficulty that may occasionally arise as to a quorum, the true remedy is not to enlarge the numbers of the Court, but to reduce the number required for a quorum, as has been done for a special purpose by the Representation of the People (Scotland) Act of 1868, the 34th section of which pro-

---

*I. The University Court.*

---

vides that for performing any duty required by that Act, *i.e.* the determination of appeals against alleged wrongful omission or insertion of names in the register of the General Council, the presence of a quorum of three shall be sufficient to constitute a meeting of the University Court.

On the other hand, there has been a considerable preponderance of opinion among the witnesses who have given evidence from the different Universities, that there is not infrequently in each a serious difficulty experienced in obtaining the necessary quorum for a meeting of the Court. The Rector elected by the students is generally a person of eminence resident at a distance from the University seat, whose public or other duties render it unlikely that he can attend, except on rare occasions. Besides the Rector, there are in St. Andrews and Aberdeen only five members out of whom a quorum of four, and in Glasgow only six members out of whom a quorum of five must be furnished. In Edinburgh, the proportion of the number of members to the quorum is larger, there being seven members besides the Rector to furnish a quorum of five; but, even here, the evidence shows that difficulty in obtaining a quorum is occasionally felt.

Further, the evidence adduced for the General Councils of the Universities indicates a strong desire on the part of members of these bodies that they should have a larger representation in the Court than the Act has given them. The view has been stated, that the small representation by a single Assessor now given to the General Council leads to the Court passing by with less regard resolutions sent to it for consideration by the General Council than would be the case were there more representatives of the Council in the body. It has also been said that the General Council is inadequately represented in the Court as compared with the Senatus; that in each of the Universities there are in the Court two members of the Senatus, who may be regarded as representing it, or, at all events, as connected with it,—the Principal and the Assessor appointed by the Senatus; and that, in Glasgow, there may be said to be a third representative of that body in the Dean of Faculties, an officer elected by the Senatus.

We cannot say that we concur in all these views. While we think it desirable that the Court should be strengthened by slightly increasing the number of its members, but not to such an extent as to impair the sense of individual responsibility, we do not think there is any evidence that the Courts of the different Universities have shown an indisposition to give due weight to representations proceeding from the Councils. Nor, again, do we

---

*I. The University Court.*

---

think that in considering the composition of the Court, it would conduce to the interests of the Universities to view the *Senatus* and the General Council as bodies to be weighed against each other as to the number of members they should send to the Court. It is also, in our opinion, a mistake to regard the Principal as in any sense a proper representative of the *Senatus*. It is true that from his position he knows what goes on in that body, and it is well that the Court should contain a member who may be able to explain authoritatively the views which have been entertained in the *Senatus* on any particular question. But the individual opinions of the Principal may be, and we are satisfied occasionally are in fact, different from those of his colleagues in the *Senatus*, and he can hardly be regarded as their representative.

As regards the Dean of Faculties in Glasgow, he is not now, as he was before the Act of 1858, a member of the *Senatus*; and the evidence shows that in the election the Senate have uniformly endeavoured to choose for the office some prominent man whose position and character were such as to fit him for the distinction, and that the choice has been uninfluenced by a regard to the particular views, whether on political or academical subjects, which the person selected might entertain. The general usage since the Universities Act has been to re-elect the same gentleman twice after his first year of office; and we have been assured that although the Dean of Faculties has sometimes taken a particular line opposed by the whole Senate, that body has immediately afterwards re-elected him in the usual way.

As we have indicated, however, we think it would be to proceed on a mistaken principle to adjust the constitution of the University Court by way of balancing opposing interests in the Council and the *Senatus*. Both bodies are interested in the welfare of the University, and as we think it would be desirable to increase to a moderate extent the numbers of the Court, we think additional representation may with advantage be given to both. In regard to the Council, this seems to us the best mode by which that body may obtain an increased weight in University affairs, the desire for which has been strongly and legitimately pressed upon us. And as there may be different interests within the *Senatus* which it would be well to have represented in the Court, we think they ought not to be confined to a single Assessor as at present. The *Senatus* is the body most immediately concerned with the daily government and administration of the University, and we think it expedient and right that an adequate representation in the Court should be secured to it.

---

*I. The University Court.*

---

As to the additional member or members to be sent to the Court by the General Council, we have carefully considered whether there should be one or two besides the member now elected by the Council. It would certainly be inexpedient to make the numbers of the Court too large. On the other hand, there may be different interests or views on academic questions within the Council itself, and to have only two members sent by that body, as would be the case were a single additional member to be given, might lead to an undue representation of a particular interest or shade of opinion to the entire exclusion of a different interest shared in, perhaps, by a large section, although not the majority, of the Council. In St. Andrews, for example, it has been represented to us that there are two classes of graduates in the Council,—the medical graduates, whose connection with the University is simply that of graduation without their having resided or received their education there, and the non-medical graduates, who have the closer tie which residence and education give. In elections of Assessor, since the Act of 1868 increased the medical section of the constituency to a large extent, we are told that it has come to be very much a contest between the medical graduates on the one hand, and the remainder of the graduates on the other, and that the medical graduates, forming the majority, generally carry their man. Now, were two members to be elected instead of one, there would probably be simply two members of Council sent by the same majority; and the minority, who certainly have not less interest in the prosperity of the University, would remain unrepresented. But by giving three Assessors in all to the General Council, *i.e.* two in addition to the one now sent, and giving to each member of Council only two votes, the minority, if at all considerable, may reckon on having one representative in the Court to give expression to its views and attend to the matters in which it may be specially interested. This, of course, involves the assumption that the three Assessors to be elected by the General Council shall be elected together, and shall hold office for the same period; and also that, in the event of any casual vacancy in the office of an Assessor, the person elected to fill his place before the usual time shall go out of office along with the other Assessors.

To the *Senatus Academicus*, we think it will be enough that one additional representative should be given besides the present Assessor. Very divergent views have been expressed to us as to the extent to which the *Senatus* should be represented in the Court. It has even been made a question whether they should be represented there at all, some witnesses being disposed to say that in the case,



---

*I. The University Court.*

---

at all events, of appointments to professorships, the members of Senatus should be excluded from any voice or influence whatever, while others urge that the Senatus should have a large representation in the Court with a special view to the exercise of the patronage of chairs, the Professors being, it is said, the most deeply interested in seeing that good appointments are made, and having presumably the best special knowledge to enable them to judge which among the candidates are the best men. We think it for the advantage of the University that the University Court should contain a fair representation of the Senatus, whose members are daily conversant with the University affairs, and whose duty and interest it is to labour to promote its prosperity. We have said that the Principal cannot be regarded as a representative of the Senatus, as he is not sent to the Court by that body, and may entertain different views from those of the majority of its members. Still he may to some extent be regarded as imbued with its corporate spirit; and, in consideration of his presence in the Court, we think it may be sufficient if a second Assessor is elected by the Senatus, who may, of course, as the present Assessor, be a Professor. The election of two Assessors will enable the Senatus to send two members representing different interests, if there be such within the body, as, for example, the interests of different Faculties.

In St. Andrews there are two Principals, one of whom only, viz. the senior Principal, has a seat in the University Court. We think that as long as the double principalship exists, the Principal of each college should be a member of the Court; and during this arrangement it will be sufficient, in our opinion, if, as now, one elected member is sent by the Senatus.

Under the head of the constitution of the University Court a difficulty has been brought before us as to the proper construction of the Act in regard to the tenure of office by the Assessor nominated by the Chancellor, and the Assessor nominated by the Rector. The provision of the Act is that 'the Rector and the Assessor nominated by him shall continue in office for three years, and the other Assessors shall continue in office for four years;' and the question is, whether the Assessors nominated by the Chancellor and the Rector respectively cease to hold office along with the persons by whom they have been appointed. The usage on this point has varied even within one University. Thus, we are told that, in the University of Edinburgh, an Assessor appointed by a Rector on the occasion of a casual vacancy during his term of office went out of office along with the Rector who appointed him; whereas, when a Chancellor of the University died,

---

*I. The University Court.*

---

the Assessor he had appointed continued to hold office afterwards notwithstanding. It rather appears that there is no provision in the Act of 1858 which necessarily brings the office of an Assessor to an end along with that of his principal. At the same time, there may be reasons of expediency why a Rector should not, as might happen, have an Assessor in the Court for the greater part of his term of office, who had been appointed not by himself but by his predecessor. On the other hand, difficulty might be occasioned in a small body like the Court by several members going out of office at the same time. We think it therefore desirable, on the whole, that an arrangement should be made whereby any new Chancellor or Rector should be entitled at once after his election to make an appointment of Assessor; but, to prevent inconvenience, the Assessor appointed by the preceding Chancellor or Rector should hold office, and should continue to act, till his successor was appointed.

A suggestion has been brought before us, to the effect that the Assessor appointed by the Rector should be entitled to act and vote as a member of the Court only when the Rector himself is absent. The Assessor, however, cannot in any respect be regarded as a delegate of the Rector. He is free to take an independent view of University affairs, uninfluenced by him from whom his appointment is derived; and we are unable to see the propriety or expediency of an arrangement which would place him in the anomalous position of having a right to act only in the absence of the Rector.

In regard to the powers of the University Court a difference of opinion has been brought before us, whether or in what cases the Court has under the Universities Act, or ought to have, a power of inquiry into or review of the proceedings of the Senate *ex proprio motu*, without being put in motion by an appeal, or otherwise prompted from without. This question, which has been dealt with differently in practice in different Universities, has arisen principally in reference to the 1st and 5th sub-sections of the 12th section of the Universities Act above quoted. It has also been mooted in reference to the 6th sub-section; but that sub-section gives to the Court the power 'to inquire into and control the administration' of the University finance; and it seems therefore beyond doubt that the Court possesses, and there can be no question that it ought to possess, the power of proceeding of itself to examine into and control the financial arrangements of the University, whensoever it may think it expedient.

The 5th sub-section is that under which the Court is empowered 'upon sufficient cause shown, and after due investigation,' to

---

*I. The University Court.*

---

censure a Principal or Professor, or to suspend him from office, or to require him to retire on a retiring allowance, or to deprive him of office. It has been suggested that the expression, 'upon sufficient cause shown,' implies that in any case under the section the procedure must be at the instance of some one outside of the Court lodging a complaint and showing cause why the enactment should be put in force against a Principal or Professor, and that the Court itself has no power to initiate a process. Such an interpretation, it is said, has actually been adopted, with the effect that a University Court has abstained from action, where its action might have been desirable, because no one could be induced to come forward as prosecutor. Without expressing an opinion on this view of the statute, we think it would be well that the power of the University Court to proceed under this sub-section of its own motion should be placed beyond doubt. The Court is not a body outside of the University so as presumably to be ignorant of what passes within it. At present the Principal and one other member of the Court are members of the *Senatus Academicus*, and must be well aware if at any time there is habitual disorder in a Professor's class or other cause calling for investigation or interference; and we think it better that the Court itself should institute the inquiry, and call before it such members of the University as may be able to give it the necessary information, than that one of the Professors or students should be required to prosecute. To require this tends naturally to defeat the object of the provision, by the reluctance of a colleague, or a student, to appear in the character of prosecutor. The power in the Court to initiate the proceedings would involve, of course, as an incident, the power to call before it all members of the University from whom it may expect information. Perhaps the case in which the action of the Court is most likely to be required under this sub-section is that of a Professor whose age and consequent unfitness for the discharge of his duties render it desirable that he should retire from his office, but who, unconscious it may be that his vigour is failing, or from a reluctance to abandon his position, abstains from applying to be allowed to retire on a retiring allowance. It would tend greatly to strengthen the hands of the Court in dealing with such a case, and to remove any hesitation they might naturally feel in putting their powers in execution, if a more liberal scale of retiring allowances were introduced, than that now established by Ordinance. The present scale was established, not in accordance with the views of the Commissioners under the Universities Act, but in deference to the opinion of the Lords of the Treasury, communicated to them in 1861.

---

I. *The University Court.*

---

The general power given to the University Court by the 1st sub-section of the 12th section 'to review all decisions of the *Senatus Academicus*, and to be a Court of Appeal from the *Senatus* 'in every case except as herein otherwise provided for,' does not stand in the same position with the special powers under the 5th and 6th sub-sections which we have been considering. It was probably not meant by the clause that the power of reviewing the decisions of the *Senatus* was to be a different power from that of acting as a Court of Appeal, and that the Court was to be entitled to review every decision of the *Senatus ex mero motu* equally as it might entertain an appeal when taken against a particular decision by some one interested. A difference of opinion, however, seems to have prevailed on the point, and it would be proper that it should be made clear, that in acting under the first sub-section the Court can act only when an appeal against a decision of the *Senatus* is presented to it.

This would, of course, in no respect interfere with the right of the Court to act *ex proprio motu* under other sub-sections by which that right has properly been given to it,—as, for example, in taking proceedings against Professors, or in inquiring into and controlling the University finance.

It has been represented to us that doubts have been entertained as to the power of a University under any circumstances to deprive a graduate of his degree, and that occasion might arise when it would be proper to do so. It could only be in extreme cases that such a measure would be justifiable; but, to provide for these, it might be well that all doubt as to the competency of action on the part of the Universities should be removed by a declaratory enactment to the effect that, in the event of a graduate being convicted of any crime or offence, the University shall have power through the University Court to deprive him of his degree, and to declare him no longer qualified for membership in the General Council.

A suggestion has been made that it would be desirable that the Court should be expressly empowered to hold property bequeathed to it, as has sometimes been the case, in trust for the University. It seems to us that this is unnecessary. The natural course for a person destining property to the University is to give it in terms to the University, which will bring it under the administration of the *Senatus Academicus*, the ordinary administrators of the University property. No real difficulty exists at present, and it seems undesirable to suggest by a clause in an Act of Parliament that the University Court is the proper body to administer a fund intended for University purposes.

---

*I. The University Court.*

---

It has also been suggested that the University Court should be expressly empowered to define the nature and limits of a Professor's duties under his commission, disputes as to these having occurred in some of the Universities between Professors whose subjects were of a kindred nature, or overlapped one another. We are disposed to concur in this suggestion. Disputes of the kind referred to are hardly fit subjects for the interference of an ordinary court of law. They are apt to be embarrassing and hurtful to the University when they exist, and it would be well that there should be an acknowledged tribunal before which they could be brought and settled. The University Court seems a natural and a safe body to have jurisdiction over them. There ought to be an appeal to Your Majesty in Council, or to the General Universities Court, should such a court be instituted in accordance with the recommendation to be made presently.

The Court of each University was, we have seen, empowered, with the consent of the Chancellor, and with the approval of Your Majesty in Council, to alter Ordinances made by the Commissioners in so far as applicable to the particular University. It has been suggested to us, and we think properly, that, as it frequently happens that other Universities are interested in Ordinances which nominally affect one only, it is desirable that all should have an opportunity of considering a proposed alteration before it is submitted to Your Majesty in Council for final approval, and of appearing, if any of them may think fit, to make representations in reference to it. We are of opinion, therefore, that, as long as the present arrangement for the approval of alterations in Ordinances subsists, it should be required that, three weeks before application to Your Majesty in Council for the approval of any alteration is made, intimation of the proposal should be given to the other University Courts, and that evidence of such intimation having been given should be submitted, along with the proposal itself, to Your Majesty in Council.

While, however, a requirement of this kind seems to us necessary, as long as the arrangements for the approval of changes in Ordinances remain as at present, we think that these arrangements are capable of being modified with advantage.

Although the University Court has exercised an important influence in each of the Scotch Universities by acting as a Court of Appeal and Supervision, there is not as yet any common body which is able to take in review and decide upon the interests and requirements of all the Universities of Scotland. It is said that in the seventeenth century this common bond of union was supplied

---

*I. The University Court.*

---

by an annual meeting of delegates from the four Universities; but, if so, this practice has for a long period been in abeyance. The Act of 1858 supplied the want temporarily by referring the framing of certain new Ordinances to a statutory Commission, and also afterwards, in some degree, by requiring for any alteration of these Ordinances the assent of Your Majesty in Council. When there have been no conflicting interests of Universities, this method of revision has proved simple and effective; but it has been found to be costly and inconvenient when a change in an Ordinance promoted by one of the Universities has been opposed by some of the others. However well fitted the Privy Council may be to advise what judgment should be pronounced on a question submitted for decision and argued by counsel before it, it is scarcely the most suitable body to decide as to the general interests of the Universities on a case submitted by a single University. To prevent this inconvenience in the case of the Universities of Oxford and Cambridge, the English Universities Act of 1877, 40 and 41 Vict. cap. 48, has established a permanent Committee of the Privy Council, called 'The Universities Committee,' to take into consideration the alteration of Ordinances, and new Ordinances proposed after the temporary Commission appointed by the Act shall have ceased to exist. Such a plan is not applicable to the Scotch Universities, for it would be impossible to obtain a permanent Committee of the Privy Council in London whose members are acquainted with the working and needs of the Scotch Universities.

We have accordingly deemed it better to recommend the formation of a General Universities Court, partly representative and partly nominated by the Crown, to act for the four Universities of Scotland in the same way that the Universities Committee of Council is intended to act for the English Universities.

We therefore recommend that each of the four Universities be represented in a General Universities Court by the Chancellor of the University (who is elected by the General Council), and by one member to be nominated by the Senatus of the University for a period of five years, and to be eligible for re-election. The consent of the Chancellor, which is at present required for the alteration of an Ordinance, would no longer be necessary if the General Universities Court were established; and it is obvious that, to give independence of review to the Chancellors as members of this Court, it ought not to be required. The elected representatives of the Universities should not be members either of the Senatus Academicus or of the University Court of any of the Universities. The nominees of the Crown should be limited to three;

---

### II. *The General Council.*

---

and might be expected to consist of Privy Councillors or other official personages who might carry the weight of their position and experience into the deliberations of the General Universities Court.

In this way the General Court would consist in all of eleven members—viz., eight representatives of the Universities, and three nominees of the Crown.

The functions of this Court would be to give sanction to changes in Ordinances, and also to make new Ordinances under any general power which might be given to them by Act of Parliament. This Court would also act as a General Council of Education in relation to the four Universities, and endeavour to attain a high and progressive standard of graduation, which should be of equal value for corresponding degrees, though not necessarily uniform in the subjects of examination. The General Court might be entrusted with making regulations for fellowships or endowments common to the four Scotch Universities; and it would doubtless be consulted when proposals were made for new buildings, needed for the development of the teaching in any of the Universities.

We do not think that the members of the General Universities Court should be paid for their services; but a certain expense would attend the meetings and administration of this important Court, and we think that this should be defrayed out of public money. If Parliament provide money for this purpose, it would not be unreasonable to expect that the General Universities Court should submit a short annual report to Your Majesty on the condition and progress of the four Scotch Universities.

### II. THE FUNCTIONS OF THE GENERAL COUNCIL.

Much evidence and many suggestions have been received by us regarding the functions of the General Council, both under the provisions of the Universities Act and under the regulations established by Ordinance of the Commissioners.

As regards the Act, the view seems to have been entertained by members of the different General Councils that the power given to the University Court by the 2d sub-section of the 12th section of the Act to effect improvements in the internal arrangements of the University, 'provided that all such proposed improvements shall be submitted to the University Council for their consideration,' enabled the University Court to proceed to effect improvements without first submitting them to the Council, it

---

*II. The General Council.*

---

being enough, according to this view, that the measures should be communicated to the Council although they might have been already carried out. This view seems to us to be founded on a mis-reading of the statute. The proviso requires that all 'proposed' improvements shall be submitted to the Council, and that being the case, it would not be a compliance with the enactment were there not to be a communication until after an improvement had been effected. It seems to us therefore unnecessary, although, if it were desired, there could be no objection to the alteration, that the word 'first' should be inserted before 'be submitted,' so as to make the proviso run, 'that all such proposed improvements shall first be submitted to the University Council for their consideration.'

The proviso, even in this shape, would not require the consent of the Council to a proposed improvement in order to entitle the Court to carry it out. The Council, however, must be consulted, so as to have an opportunity of expressing its opinion to the Court while the measure is still merely in contemplation; and we do not understand that the members of Council whose views have been brought before us think it expedient that the Council should have a veto on a proposal communicated to them by the Court. They hold, as seems obvious, that this might place too great a bar in the way of internal change. Through the discussion of questions affecting the wellbeing of the University, and by laying before the Court the results of its deliberations, the Council is enabled to exercise an important influence on the action of that body. But it is generally admitted that the constitution of the Council is not such as to admit of its being advantageously or safely entrusted with administrative functions. The number of members varies from about 4000 in Edinburgh to about 1500 in St. Andrews; whereas the attendance at the meetings of Council is relatively very small, so as hardly to ensure an adequate representation of what may be the opinions of the aggregate body. In Edinburgh, the average attendance has been stated to us as not exceeding fifty or sixty, including the members of the *Senatus* and the University Court; and in Glasgow, where the members of Council seem generally to have attended in somewhat larger numbers than in the other Universities, a meeting of from sixty to seventy has been described to us as a good meeting. It cannot, indeed, be expected that the members of Council should ever attend in numbers at all corresponding to the size of the body. The great majority are resident at a distance from the University seat, being engaged in professional



---

II. *The General Council.*

---

or other employments, throughout the United Kingdom and elsewhere; and to give executive powers or a veto on University legislation to those among the few resident in the neighbourhood of the University who may have sufficient time to attend the meetings, might be to enable a small section of the Council to exercise a direct control over University affairs in a way of which the majority of the body would disapprove. Nor in matters of administration would it be desirable, even if practicable, to allow absent members to give their votes by proxy or by voting letter, as is both practicable and expedient in elections. On questions of policy, the views of persons attending a meeting are naturally and properly influenced by the discussion which takes place, and it would be hazardous to admit votes collected from persons at a distance who have not had an opportunity of profiting by the arguments for or against a particular proposal. Having regard to these facts, we could not recommend, and we do not think it is generally wished, that the Council should be vested with anything beyond the power of making representations to the Court which the Act of 1858 has given them. The way in which their influence and interest in the University may legitimately be increased is by an extended representation in the University Court being assigned to them as we have proposed should be done.

With reference to the same clause of the statute, viz. section 12, sub-section 2, and also with regard to the right of representation to the Court generally, which the Council possesses under the 6th section, the suggestion has been laid before us that the Council should have the power of holding special or *pro re nata* meetings between the half-yearly statutory periods, on a requisition being signed by a certain number of members, such as twenty-five or fifty. We do not regard it as expedient that such a power should be given. Few occasions are likely to arise on which questions calling for representations from the Council become so urgent in point of time as to require to be discussed and decided upon between two half-yearly meetings; and to give a certain number of the Council the right to hold an extraordinary meeting at any time might lead to abuse by enabling a small number to meet, perhaps at an inconvenient time for the general body, and to pass resolutions running in the name of the Council, to which the majority might be opposed.

Akin to the suggestion that the Council should be entitled to hold extraordinary meetings, and made generally by the same persons who have supported it, is the suggestion that the Council should have a power of adjournment from day to day, and that the

---

II. *The General Council.*

---

provision in the Commissioners' 11th Ordinance, already quoted, which prevents such adjournment should be repealed. In this suggestion, also, we are unable to concur. No instance has been adduced to us of the General Council of any of the Universities having found difficulty in concluding the business before it in one day, and we think that the existence of a power of adjournment might give rise to inconvenience and perhaps evil. When a question of interest is down for discussion, members occasionally come from some distance to attend the meeting, with the assurance that they will have the opportunity of voting upon it in the course of the day. Had they not this assurance, they might perhaps abandon the idea of coming to the discussion; and, if they did come, they would certainly be exposed to the risk of an adjournment which, by postponing the vote, might defeat the object with which they had come to the University—of recording their opinion on the question. No hardship has been found to arise from the rule made by the Commissioners, and we think it ought not to be altered.

A further suggestion for an alteration of a provision of the same Ordinance, that, namely, declaring that the Council, although entitled to appoint committees to prepare business, shall not be entitled to delegate its functions to a committee or to act by means of a committee, seems to us equally destitute of any ground to recommend it. This provision we regard rather as declaratory than enacting, for the Council being a statutory body cannot legally delegate its powers to any of its members or authorize them to act in its name. Such a power might, no doubt, be given to them by statute, but it would, in our opinion, be an anomaly, and we have not heard any arguments to show that it is necessary or desirable. The usage of the General Assemblies of the Established and Free Churches in Scotland to carry out through their Commissions business that has been committed to them by the Assemblies, has been cited as an example that might be followed. The Commission of Assembly, however, includes all the members of the Assembly itself, so that it hardly affords an instance of a body acting through a special committee. Moreover, the authority to be given to acts done by the Commission of Assembly has not, as far as we are aware, been placed on a certain basis; and the usage in question is not of so definite and precise a character as to admit of its being followed with advantage as a precedent for legislation in reference to the General Councils. There is the further obvious objection to the application of such a system to the University Councils, that a meeting of Council by which any

---

### II. *The General Council.*

---

committee is appointed contains in mere numbers a very inadequate representation of the whole body.

Regarding the constitution of the General Council, we have not received many suggestions. A question, however, has been raised, whether it might not be desirable to allow persons who have an *ex officio* qualification—such as the Rector, members of the University Court, and Professors—to continue members of Council after they have ceased to hold the office giving the qualification. Again, on the part of the non-medical members of Council of St. Andrews, it has been represented to us as a grievance, that they are outnumbered by the medical graduates, who have no connection with the University but that of graduation.

As to this special matter in St. Andrews, we think it unlikely that a proposal would now be entertained for disfranchising the graduates in medicine who were given by the Representation of the People Act, 1868, a qualification for the General Council, although they might not have received any part of their education in St. Andrews. We think, however, that the grievance complained of by the other graduates, that they are outnumbered and outvoted by their medical brethren, will be less felt than at present, if the General Council receives the right to elect three members of the Court in the way we have recommended.

The position of *ex officio* members of Council, on their qualification ceasing, has been brought before the University Court of more than one of the Universities when sitting under the Act of 1868, as a Court to determine registration appeals. Both in Edinburgh and in Glasgow it has been decided that the right of membership ceases with the qualification out of which it arose, and that an ex-Rector or ex-Professor having no other than an official qualification ceases to be a member of Council on the expiration of his office. In the case of a Professor, who has given probably the best part of his life to the University work, this rule, it is said, involves peculiar hardship; his connection with the University having been of a closer and more enduring character than that of an ordinary graduate, whose bond consists simply in the possession of a degree. Many persons, therefore, would be disposed to allow his qualification to remain unaffected by the fact that his professorship has come to an end, and some would further extend the same rule to the holders of other University offices which confer a qualification. On the other hand, the view is taken that it would be anomalous to admit a person to continue a member of Council after the office which gave him his qualification had ceased, and that to allow it might lead to the introduction of political elements in elections to certain Uni-

---

### III. *The Course of Study and Regulations for Graduation.*

---

versity appointments from which these are now fortunately absent, and might intensify their influence in others, where they are thought at present to operate too powerfully. On the whole, a majority of our number are of opinion that in the case of Professors it would be reasonable and desirable to allow the right of membership to continue during life, and that the same rule should be applied to Rectors, in respect of the high character of the office to which they have been elected. We would not, however, extend the rule to other *ex officio* members of Council, such as Assessors in the University Court. In the case of Rectors and Professors, we think the rule of life-membership should be made retrospective, so as to include all those who have hitherto held those offices.

It may be added, in connection with the right of membership in the General Council, that a question has been suggested, whether a person who is a member of two University Councils, which together elect a member of Parliament under the Act of 1868, as, for example, those of Edinburgh and St. Andrews, should be entitled to vote in each University, he having a qualification in each. It appears to us in principle that this ought not to be admitted, it being a general rule in Parliamentary elections that a man should not have two votes in the same election. The form of the voting-paper given in a schedule (G) to the Representation of the People (Scotland) Act, 1868, contains a declaration that the voter has signed no other voting-paper at the election. If the declaration were so expressed as to state that he had neither signed any other voting-paper nor had voted at the election in either University, the exclusion of a double vote would be complete.

### III. THE COURSE OF STUDY AND REGULATIONS FOR GRADUATION IN THE FACULTIES OF ARTS, MEDICINE, LAW, AND DIVINITY.

In considering the course of study and regulations for graduation in the different faculties, we have directed our attention to the regulations established by the Commissioners under the Act of 1858, by which, with slight modifications, the present system of graduation is governed. We have also received a large amount of evidence bearing on the subject, and many valuable suggestions have been laid before us in reference particularly to the conditions of graduation in Arts and in Medicine.

#### *Graduation in Arts.*

In Arts, the rules under which degrees are conferred are those established by the Ordinances Nos. 14, 18, and 69 of the Com-

---

III. *Graduation—Arts.*

---

missioners under the Universities Act, subject to a slight variation in regard to the examination of candidates for honours, who are now permitted to proceed to examination for honours in any department without having previously passed the ordinary examination in the same department, as was necessary under the Ordinance No. 14. It is stated in the General Report of those Commissioners, that in Aberdeen alone of the Universities had the Court at its date exercised the power given by the Ordinance No. 18, of requiring from candidates for the degree of M.A. attendance on a course of Natural Science, the Aberdeen University Court having required attendance on the lectures of the Professor of Natural History. Since the date of the Commissioners' Report, the University Court of St. Andrews has made a regulation under the same Ordinance, requiring attendance on a course of Chemistry. Both in St. Andrews and in Aberdeen candidates must pass an examination in that branch of Natural Science, on a course of which attendance is prescribed. Neither in Edinburgh nor in Glasgow has the power of requiring attendance on a course of Natural Science been exercised by the Court.

The basis of the curriculum established by the Commissioners' Ordinances is, as they explain, very much that on which the course previously followed for a long period in the Scotch Universities had proceeded. In this course are embraced the three departments of (1) Classical Literature, including the languages and literature of ancient Greece and Rome; (2) Mental Philosophy, including Logic, Metaphysics, and Moral Philosophy; and (3) Mathematics, including both Pure Mathematics and Physics, or Natural Philosophy. To these subjects the Commissioners added English Literature, which had not previously been required.

The course thus adopted by the Commissioners, in accordance with the long usage of the Universities, has, subject to some exceptions, the merit of breadth and catholicity. We are not, therefore, surprised that the Commissioners resolved not to make any material change in the established curriculum. It is satisfactory also to find that their regulations have had the effect generally of encouraging graduation, as may be inferred from the larger proportion of the students who proceed to a degree, as compared with the number who did so formerly. This is especially apparent in the University of Edinburgh, where there has been a gradual and steady increase in the number of the graduates in Arts.

While acknowledging, however, the value and the success of the regulations which the Commissioners established, we think, after careful consideration, and after weighing the evidence before

---

III. *Graduation—Arts.*

---

us, that the conditions of University education have greatly altered even since the date of their Ordinances. In the English Universities, the advances that have been made in certain branches of knowledge, and the requirements of modern times, have made their influence felt; and we find, accordingly, that, while providing for a certain basis of general culture, without which no student can proceed to a degree, these Universities have thought it right to permit in the later stage of a student's career a considerable latitude as to the courses of study open to him. We do not think that in Scotland there is less reason for a similar option being given. The present curriculum, indeed, is generally well suited for those students who are preparing to become clergymen in the Established or other Presbyterian Churches in Scotland. It tallies, for the most part, with the requirements of study enjoined by these Churches; and for that reason, among others, it has a strong hold on the feelings of many who interest themselves in Scotch education, and will still, no doubt, be followed by a large proportion of the students. But outside of those for whom it is thus professionally well suited, there is an increasing class to whose future career parts of it have little relation, and we cannot be surprised to find that a number of students come year by year to the Arts classes in some of the Universities, who, after attending for a year or two of the course, leave the University for other pursuits without taking a degree in Arts. This is especially noticeable in Glasgow. The number of students in Arts there is at present above 1100, while the number who graduate in each year is only about forty or fifty. In this way there cannot be more than about one in every six or seven of the students of any year who proceed to a degree. We think it of great importance that the field of study should be so enlarged as to make it more suitable and attractive to different classes of students than at present, and this object can, in our opinion, be best attained by allowing, after a certain foundation of general culture, a tolerably free choice among several distinct lines of study adapted to various bents of mind, and having relation to different professional pursuits. We believe, that by the opportunities which such a freedom of selection would present, many students would be induced to take a larger share than they now do of University study, and that the advantages of the culture which the University affords would be extended.

Moved by these considerations, we have come to the conclusion, that to secure a basis of general culture, every student proposing to proceed to the degree of M.A. should be required to pass a 'First Examination' in Latin, Greek, Mathematics, English, and, when the state of education in the schools renders it practicable,

---

### III. *Graduation—Arts.*

---

in Elementary Physical and Natural Science. This examination should be passed at the beginning of the University session,—either the winter or the summer session,—every student proposing to graduate being required to pass it, whether he may have been previously a student in the University or not. With some modification, the examination might be so adapted as to apply not only to students proceeding to a degree in Arts, but to those also intending to graduate in Law, Science, or Medicine. In the case of persons proceeding in Law, we think that an examination in translating from French and German should be allowed as an option for Greek. Again, in the case of students proposing to graduate in Science or Medicine, we think that, as some knowledge of modern languages is most important to them, they should be examined either in translating from French and German, or in translating from one of these languages and in Greek. In this way, it would be necessary for them to show ability to translate from at least one modern language.

As we shall explain afterwards, we regard this as the best equivalent for an entrance examination. Through its application to all proposing to graduate, whether previously students at the University or having come direct from school, a salutary reflex action on the schools will be secured by the encouragement given to them to send their pupils to the University in an advanced state of preparation. In a different shape, and if accompanied by the condition of exclusion from the University should the candidate fail to pass, an entrance examination would, in our opinion, be attended with injury rather than benefit.

After passing the 'First Examination,' the candidate for a degree in Arts should be allowed to proceed in the present course, if he please, and as, no doubt, many will still do. If, however, he prefer to take a different course, we propose that he should be allowed to take any one of the five following departments or lines of study, viz. :—

- I. LITERATURE AND PHILOLOGY.
- II. PHILOSOPHY.
- III. LAW AND HISTORY.
- IV. MATHEMATICAL SCIENCE.
- V. NATURAL SCIENCE.

The branches to be included under these different departments we propose should be as follows :—

I. LITERATURE AND PHILOLOGY should comprise the subjects of Latin; Greek; and English Literature; together with one of the following subjects, viz.: Comparative Philology; Sanskrit;

---

 III. *Graduation—Arts.*


---

Hebrew ; a Modern Language ; Gaelic, with Celtic Philology. Questions on history and geography incidental to each subject should form part of the examination.

II. PHILOSOPHY should include Logic and Metaphysics ; Ethics and Psychology ; and the Physiology of the Nervous System. The first two subjects are understood to embrace the History of Philosophy.

III. LAW AND HISTORY should include Civil Law ; either Constitutional Law or International Law ; and Political Economy ; together with the history of any one of the following groups, viz.: Greece and Rome ; Modern Europe ; Egypt, Syria, Palestine, and Arabia ; India ; Ancient and Modern America.

IV. MATHEMATICAL SCIENCE should embrace Mathematics, pure and applied ; Natural Philosophy ; and Physical Astronomy.

V. NATURAL SCIENCE should comprehend four groups, viz.:—  
 (1) Applied Mathematics, Natural Philosophy, and Chemistry ;  
 (2) Natural Philosophy, Chemistry, and Physiology ; (3) Physiology, Botany, and Zoology ; (4) Natural Philosophy, Chemistry, and Geology. A candidate should be allowed to take any two of these four groups ; and the practical working of the arrangement would be that Natural Philosophy and Chemistry would be compulsory, while an option would be given between the mathematical and the morphological sciences.

It may be explained that the subjects of examination in the sciences comprehended in Department V. are such as are required in the first Bachelor of Science examination, as detailed in the Calendars of the Universities of Edinburgh and London (1877). The purpose we have had in subdividing the subjects of Department V. into groups has been, in the first place, to ensure a sound acquaintance with Physics and Chemistry, which lie at the foundation of all natural science ; and, in the second place, so much being secured, to give fair play to individual intellectual tastes and peculiarities. It is rare to find a man equally capable of dealing with long chains of abstract reasoning, or with experimental research, and of observing and remembering the analogies and differences of form. The scientific aptitude, when strongly marked, is either for mathematics, for experimental investigation, or for morphology, rarely for all three.

In regard to the scientific subjects, mere book knowledge should not suffice ; practical work in the laboratory should be essential.

To entitle a candidate to the degree of M.A., he would, of course, be required to attend the University courses on, and to pass



---

III. *Graduation—Arts.*

---

an examination in, the subjects of the department selected by him, with the options within the department which we have indicated.

The necessary curriculum should be arranged so as not to require more than three years' attendance at the University after the time of a student's passing the 'First Examination'; and in no case should attendance on a class for more than one session of the curriculum be required.

We think it undesirable to require that the final examination in all the subjects of any department should be undergone at the same time. By giving an option to candidates to take the examination in instalments, and perhaps even by allowing the examination in each subject to be passed as soon as or shortly after the attendance on the particular class has been concluded, the attention of the candidate to the subject he is engaged in studying is better secured than by making it necessary for him to be prepared in a number of different subjects at one time. We think, also, that it is possible in this way to require a higher standard of attainment in each subject of examination.

For graduation with honours nothing but greater proficiency in the same subjects should be required. At present, in each of three of the departments for honours established by the Commissioners under the Universities Act, viz. Classical Literature, Mental Philosophy, and Mathematics, there are two grades of honour, a first and a second class, while in the fourth department, that of Natural Science, there is only one grade. Several witnesses have expressed a decided opinion that it would be an improvement to have three grades of honour in each department, on the ground that a second class, which is really a mark of honourable distinction, is now looked upon by the students as a failure, and that many who might be expected to come forward for honours, but who are afraid they may not succeed in reaching the high standard properly reserved for the first class, prefer to take the ordinary degree rather than run the risk of being placed in the second class, to which this supposed slur attaches. These difficulties, however, arise from the existing classification of honours. If there were, as we venture to recommend, only one class of honours of a high character, and if the successful candidates were placed in alphabetical order in that class, there would probably be a desire to enter it. According to the plan proposed by us of specialized schools of study, it would not be necessary to have an honour examination distinct from the pass examination. The honour class would denote high excellence in the pass examinations of the specialized subjects of study.

Among the subjects of the 'First Examination' which we propose

---

 III. *Graduation—Arts.*


---

should be passed by all candidates for degrees whether in Arts, Science, Medicine, or Law, we have included Elementary Physical and Natural Science, when 'practicable'. We have attached the condition 'when practicable' to this subject, as it may be doubtful whether many of the schools from which the Universities now receive students give instruction in the branches which we include under the term. By introducing the requirement gradually, however, in the Universities, a valuable influence will be exerted on the schools in inducing them to provide elementary teaching in these branches.\*

Among the regulations made by the Commissioners under the Universities Act with reference to graduation in Arts, there is a provision for the case of students who take part of their course at one University and complete it at another. Students in that position are allowed to proceed to a degree in the latter University, provided they have given attendance there during the last two sessions of their course. It has been represented to us that cases have occurred where this condition has operated with hardship—a student, for example, who, in the present four years' curriculum, takes his first year at one University, then two years at another, and finally his fourth year at the University with which he began, being disqualified from graduating at either without an additional year's attendance. It may probably be desirable to modify the provision of the Ordinance so as to enable him to graduate at the University at which he has taken his first and last years of study. Should a student have taken more than one year at one University, and his last year at another, he might be allowed to graduate at the former University, as that in which he has taken the greater part of his course. It will be kept in view that, under

---

\* The topics to be embraced are such as the following, viz.:—

The physical geography of Britain ; its chief water partings, river basins, and mountain ranges :

The composition of the commoner rocks and minerals ; the nature and properties of air ; of fresh and sea water :

The elementary phenomena of meteorology ; the principles of the barometer, thermometer, and hygrometer :

Changes of the land brought about by the action of the sea, of rain and rivers, of frost and ice ; transport of materials, and formation of new deposits in deltas and elsewhere ; accumulation of animal and vegetable exuviae ; elevation and depression of land ; earthquakes ; volcanic products :

The salient physical features of the great continents and oceans :

The general structure of the earth's crust ; the internal temperature of the globe ; the distribution of active volcanoes, and the phenomena which they exhibit ; the form and size of the earth ; its movements and distance from the sun ; the general conditions of climate ; the form, size, distance, movements, and phases of the moon ; the nature of eclipses :

The physical character, form, and dimensions of the sun ; the solar system, with the character of the chief planetary bodies other than the earth ; meteorites, comets, fixed stars, nebulae.

### III. *Graduation—Medicine.*

the arrangements we propose, the necessary curriculum would not extend over more than three sessions.

#### *Graduation in Medicine.*

We would first observe that the regulations published in the Calendars as to the preliminary examinations for medical students vary in the different Universities, and appear to have gone beyond the powers given by the Ordinances of the late Commission. It is desirable that the standard of the preliminary examination should be the same as that of the 'First Examination' recommended by us in dealing with the subject of graduation in Arts, and that the corresponding examinations made by other bodies, and recognised as equivalent, in whole or in part, for those of the Scotch Universities, should be recognised by one common and uniform Ordinance, applicable to the whole four Universities, made after careful consideration.

On the subject of the curriculum and degrees in Medicine, the evidence has led us to the following conclusions:—

1. That the purely scientific studies should be completed at an early period of the curriculum, so as to enable the student to devote the greater part of his time to work which bears directly upon the duties of his profession;
2. That it is desirable that, throughout his career, the student should have his whole attention directed to the immediate subjects of his study, without being distracted by the necessity of keeping the results of previous work up to examination point;
3. That the final examination should relate exclusively to professional subjects.

Very weighty arguments have been used in favour of allowing the student to be examined in any subject as soon as his prescribed course of study in that subject is completed, and of permitting him, if he pass the examination, to omit the subject from his final examination. On the other hand, it is obviously desirable that some guidance should be given to inexperience, and that the student should be encouraged, if not compelled, to take up his studies in their natural order, and with the least possible waste of time and energy.

The conclusions at which we have arrived might all be practically carried into effect by the following regulations:—

1. That all examinations conducted by the University shall be held twice a year, once at or before the commencement of the winter session, and once at or before the commencement of the summer session.
2. That every candidate for degrees in Medicine shall, before

---

III. *Graduation—Medicine.*

---

commencing his professional studies, pass the 'First Examination,' omitting Greek and including French and German, or taking one of these modern languages along with Greek, and shall devote not less than four years to the course of study at present prescribed by Ordinance.

3. That no candidate for degrees in Medicine shall be admitted to the professional examination in Human Anatomy or Physiology, or in any purely medical subject, unless he has passed the examination in the second and third groups of the Natural Science department (V.) of the M.A. degree, *i.e.* in Natural Philosophy, Chemistry, Elementary Physiology, Botany, and Zoology.

4. That the final examination for the medical degree shall be confined to the practical subjects of Medicine and Surgery, both systematic and clinical, Obstetrics, Pathology, Therapeutics, Medical Jurisprudence, and Hygiene, and that no candidate shall be admitted to the examination unless he has passed in the other subjects of the medical curriculum.

In practice this scheme would work in the following manner:—

On commencing his medical curriculum either at the beginning of the summer or that of the winter session, the student would pass the 'First Examination,' and would be freed from the necessity of occupying himself with any but preliminary scientific or medical studies in his further course.

He would then be practically compelled to proceed to his preliminary scientific studies, which he would take, some in the winter and some in the summer of his first year, and he would have the advantage of finishing each set by passing his examination in that set at the end of the respective sessions.

Having got successfully through the work of the first year, he would proceed to Human Anatomy and Physiology, and the purely medical studies. He would be permitted to go through them and take his examinations in whatever order he pleased, except that the examinations in the practical subjects above named must not be taken before the end of the four years of study.

The degree which a student now receives on passing his professional examination at the end of his course is that of Bachelor of Medicine (M.B.). Along with this degree he is entitled, if he please, to receive the further degree of Master in Surgery (C.M.), on payment of a fee of five guineas in addition to the fees (fifteen guineas in all) previously paid by him as a candidate for the degree of Bachelor of Medicine. The purpose of admission to the additional degree is to clothe the candidate with a double qualification, *i.e.* a qualification in Surgery as well as in Medicine, which is required for appointments by several of the public boards in the country.

III. *Graduation—Medicine.*

It has been said by more than one witness, that the system of obtaining the degree in Surgery on a mere money payment is misleading,—that it induces a belief that the possessor of the two degrees is more highly qualified than a candidate who has contented himself with the single degree of M.B., and that it is therefore desirable that the degree in Surgery should not be granted, except on the candidate having shown some special distinction in that branch, as by his having passed an additional examination in Anatomy and Surgery besides that required for the single degree of M.B. By others it has been proposed that, for the degree in Surgery, attendance on a course of Operative Surgery, in addition to the courses of Surgery and Clinical Surgery now prescribed, should be made imperative.

We think there may be some ground for the objection, that the practice of making admission to the degree in Surgery depend merely on the payment of an additional fee is apt to lead to misconception. But we think that the course suggested of requiring additional attendance or a further examination in Surgery to that necessary for the degree of M.B. would also be objectionable, as implying that a candidate who had not given the additional attendance or passed the further examination, and who proceeded only to the degree of M.B., had received a University diploma entitling him to practise without a competent knowledge of Surgery. We have received no evidence to show that the existing requirements are not such as to furnish an ample test of the candidate's knowledge and skill in that branch; but if they should appear to be in any respect defective, the proper remedy, in our opinion, would be to enlarge the present requirements for the M.B. degree, so as to secure on the part of every graduate a due qualification in Surgery, as well as in the other departments of the medical profession. We should regard it as a mistake to give a recognition by a difference in the University requirements to a distinction between a qualification in Medicine and a qualification in Surgery. The proper remedy to obviate the possibility of the misconception referred to is not to grant the degree of M.B. without a degree in Surgery,—to require, in short, every candidate to take his degree in Surgery along with his degree in Medicine. The number of persons who in practice take the single degree of M.B. is at present limited.\* The total amount of the fees now

\* This appears from the following statement of the number of persons who had graduated in the last ten years, for which we have returns, as M.B. and C.M. respectively :—

|            |   |   | M. B. | C. M. |
|------------|---|---|-------|-------|
| Glasgow,   | . | . | 435   | 401   |
| Aberdeen,  | . | . | 439   | 420   |
| Edinburgh, | . | . | 704   | 622   |

---

III. *Graduation—Medicine.*

---

payable for the double degrees is twenty guineas (£21), and probably the best arrangement would be to make that sum payable in certain instalments at the different stages of the candidate's examination, and not to make any of it dependent on his admission to his degrees.

As regards the title of the degree in Surgery to be granted along with the degree of Bachelor of Medicine, the degree in the Scotch Universities has hitherto been that of C.M. (Master in Surgery), that having been the only degree in Surgery named as a qualification for registration in the Medical Act of 1868, 21 and 22 Vict. cap. 90. By an amending Act, 'The Medical Practitioners Act, 1876,' passed since we began our inquiry, it has been provided that 'all persons who have obtained from any University of the United Kingdom legally authorized to confer the same the degree of Bachelor in Surgery shall be permitted and are hereby empowered to register the same as a qualification under the "Medical Act."' We are of opinion that it would be desirable to obtain an alteration of the Ordinances regulating graduation in Medicine in the Scotch Universities, to the effect of substituting the degree of Bachelor for that of Master in Surgery as the degree to be granted along with the Bachelorship of Medicine. This would make the double degree more symmetrical than at present; and just as now a Bachelor of Medicine may, after a certain interval, proceed to the higher degree of Doctor of Medicine, if he desires, and if he exhibits qualifications entitling him to the distinction, so we think it might be made competent for a graduate, if he desires to follow the special line of a consulting surgeon, to receive at a subsequent time the degree of Master in Surgery, on giving evidence that he is worthy of the higher degree. The objections to granting degrees in Medicine and degrees in Surgery separately, as denoting different qualifications, do not apply to the case of these higher degrees, which are sought, not as giving titles to practice, as in the case of the minor degrees, but as indicating that the holder has chosen to devote himself to, and has attained distinction in, a special department of his profession.

It will be understood that in the observations we have been making on graduation in Medicine we have had regard only to the Universities of Edinburgh, Glasgow, and Aberdeen, in each of which there is a large and flourishing medical school, and each of which (subject to the recommendations we shall afterwards make as to increasing the efficiency of their establishment in some respects) has the means of giving full instruction in the various branches of a medical education. The case is different with the University of St. Andrews. That University does not, and cannot be expected,

---

 III. *Graduation—Medicine.*


---

to afford the proper means of education for the medical profession. Of its position in this respect a full explanation has been given by the Commissioners under the Universities Act in their General Report, and also, more particularly, in their Special Report to Your Majesty in Council, of date 20th December 1861, which is given in the Appendix to their General Report. It is therefore unnecessary for us to enter into any detail on this subject, and it is enough for us to refer, as showing the peculiar position of St. Andrews in regard to the means of a medical education, to a passage in the Special Report of those Commissioners, in which they say, that in the University 'there are indeed a Professor of Medicine and a Professor of Chemistry; and by means of a recent Ordinance of the Commissioners provision has been made for the teaching of Natural History. The lectures, however, of the Professors of Medicine and Chemistry have rarely, if ever, been attended by students with the view of qualifying themselves for the medical profession. Independently of this deficiency in the means of instruction, the smallness of the population of the town of St. Andrews, amounting only to about 5000, and the want of an hospital, present insuperable obstacles to the existence of a medical school.'

We also think it unnecessary to follow in detail the reasons assigned by those Commissioners for placing restrictions on the exercise of the right of granting degrees in Medicine by the University of St. Andrews. Among these restrictions is one imposing a limit of ten on the number of medical degrees which the University may confer in any one year. Against this limitation some of the Professors and others connected with the University have made representations to us to the effect, either that the restriction should be altogether removed, or, at all events, that it should be so relaxed as to admit of a larger number of degrees being conferred; and the number of twenty-five has been suggested as a reasonable number to be allowed in each year. It is said, that there are as many as thirty or forty applicants every year for the degree, the number in 1876 having been as many as sixty; that this large number of applications shows that the degree supplies a felt want in the medical profession by enabling practitioners who have not attended a University to obtain the degree of Doctor, if they desire to become consulting physicians, after having engaged for some years successfully in ordinary medical practice, and that there is, therefore, good reason for allowing more applications to be entertained. It is added, that much disappointment is felt by applicants when they are informed that the number to be admitted is so limited, and that the limitation operates to prevent many from coming forward. It would be out of

---

III. *Graduation—Medicine.*

---

the question, it is said, to propose to men of mature years engaged in practice to submit to a competitive examination for the ten best places among those who may apply. The dissatisfaction generally felt at the restriction is represented to be such that even the number of ten may be expected to fall off; and this is said to be rendered more probable by an arrangement contemplated, if not already made, by the University of Durham, under which persons who have been registered practitioners for a certain number of years are, on passing a satisfactory examination, to be admitted to a degree in Medicine, without restriction as to numbers, or as to the place where they may have received their education.

We have given careful consideration to the views thus pressed upon us, but we do not think that any good ground has been shown why the restrictions imposed by the Commissioners under the Universities Act should be removed or relaxed. We readily believe that it is the desire of the present Professors in St. Andrews to give to the degree as high a character as possible, and to leave no room, by any laxity in the examination, for the suggestion that the graduation system is being unduly fostered with a view to the pecuniary interests of the University. But it is impossible to feel confident that this will always be so, and we do not see that any effectual security against a different practice is attainable, except by such restrictions as the Commissioners have imposed. With regard to the action of the University of Durham, which is relied on, the information we have received is not very precise, and it seems rather to refer to a regulation which is merely proposed than to one actually in operation. But even if such a regulation as is described were put in force by that University, we do not think it is a precedent which should be followed in St. Andrews. We are not aware what precise conditions Durham proposes to require from its candidates, or what may be the extent and nature of the examinations to which they will have to submit. It may be that the authorities of that University are able to guard the system with sufficient securities against its leading to abuse; but in St. Andrews we do not see that these can be provided except by the operation of the present restrictions. Even as the system now exists, the manner in which the privilege of conferring ten degrees of M.D. annually to practitioners has been exercised was referred to in 1875, by Visitors appointed by the General Medical Council, as unsatisfactory. The remedy proposed by these gentlemen was to make the examination a competitive one, and to select the ten best of the competitors in each year; but such an arrangement is regarded by those who ask for a relaxation as inexpedient if not impracticable. On the whole, we think that



---

*III. Graduation—Law.*

---

the present restrictions should be maintained, so long as there is no complete medical school in the University of St. Andrews.

In connection with graduation in Medicine in St. Andrews, the suggestion has been made that a medical school might be established in Dundee, which is only about twelve miles distant and has a large population, and in which, also, there is a medical and surgical hospital, and that this school might be affiliated to the University of St. Andrews much in the way in which, we understand, a connection subsists between the medical school at Newcastle and the University of Durham. No definite or practical proposals, however, for any such scheme have been laid before us. We shall advert afterwards, under the head of New Professorships, to the suggestion of an academic connection between St. Andrews and Dundee.

*Graduation in Law.*

On the subject of degrees in Law, the most important suggestion that has been laid before us is one to the effect, that a certain elasticity or variation in the lines of study should be allowed to candidates for the degree of Bachelor of Laws (LL.B.), as we have recommended in regard to the course of study for the degree of M.A. At present the candidate for LL.B. must be a Master of Arts, and he must have passed through a curriculum of three years in law, including attendance on a course of not less than eighty lectures in each of the branches of Civil Law, Law of Scotland, and Conveyancing; and of not less than forty lectures in each of the branches of Public Law, Constitutional Law and History, and Medical Jurisprudence. This course ensures a complete legal education of a high character for any one intending to follow law as a profession; but, while suitable for such persons, it is said to be in certain respects too exclusively professional, and so to be not well adapted for others who may have no intention of becoming practising lawyers, but who may desire to enter the civil service of the State in some of its more important departments, such as that of diplomacy, or who may wish to qualify themselves to follow a public career, as members of Parliament, or to hold administrative positions. The example of various foreign States has been quoted to us, where a close connection between the training given in the Faculties of Law in the Universities and the public service subsists, and in reference to which very interesting information has been laid before us. In the University most recently founded by the German Government, that of Strasburg, the conferring of a degree in social and political science has been entrusted to the

---

III. *Graduation—Law.*

---

Faculty of Law, in accordance with the ancient usage of most of the German Universities. Any one proposing to enter the public service of the State in Germany is required to attend, besides courses on the Philosophy and the History of Law, courses on such subjects on the political side of the Faculty, as Political Economy, Police, Statistics (embracing Comparative Jurisprudence), Administration, Technology, and even Agriculture and Forestry. In view of such arrangements, and with the object of giving greater encouragement to the scientific study of law, and in the hope also of obtaining from the Government some substantial recognition of the value of political or administrative training in the Universities, as is now given in the way of appointments in the public service by foreign Governments, it is pressed upon us as expedient to open up the course of study for the degree of LL.B. to some extent, and to admit such branches of science as might be of importance to men expecting to be engaged in certain departments of service under the State.

We regard these suggestions as well worthy of consideration by those with whom rest the arrangements for appointments in the public service. Were some such recognition to be given by the State to the importance of University training as is advocated, we think that the suggestions we have referred to for allowing a certain degree of elasticity to the course for LL.B. would properly be entertained by the Universities with the view of modifying the present curriculum in accordance with the public requirements. In the meantime, matters can hardly be regarded as ripe for the introduction of the changes referred to. We think, also, that the alternatives presented by the Law and History department, which we have proposed for the degree in Arts, may meet the object of promoting the study of law in its scientific aspects, which is at present too generally neglected, and the importance of which we fully recognise.

Another suggestion, of a somewhat different kind, has been made to us in regard to graduation in Law. At present the highest degree in Law, that of Doctor of Laws (LL.D.), is conferred by the different Universities not as a degree marking the possession of legal attainments shown by education and examination, but merely as an honorary distinction granted by the University to persons who may be thought worthy of the honour for their literary, scientific, or public eminence, and who are not necessarily connected with the Faculty of Law. It is represented that this is in effect an abuse; and it is urged as desirable that, at all events, the degree should be made attainable by law students at the end of a certain

---

*III. Graduation—Divinity.*

---

period after their receiving the degree of LL.B., and on complying with such further conditions as the University may see fit to require; in short, that even if the degree is retained as a mere mark of honorary distinction, it should not be so retained as to exclude students of law from the right to proceed to it as the highest degree in their Faculty. There is no doubt that in the English as well as in other Universities this right is acknowledged and exercised, although the degree is also granted *honoris causâ tantum*. At the same time, the exclusive use of the degree as a simple mark of honour has become so inveterate in Scotland, that we think to restore it as an indication of high attainments after examination in law might lead to confusion. The grievance complained of is, after all, more sentimental than real, the degree of Bachelor of Laws (LL.B.) sufficiently answering the purpose of marking the possession of a high and complete legal education.

In conferring the degree of LL.D., however, as a mark of honour, in accordance with existing usage, we would strongly impress on the Universities the importance of reserving it for persons whose acknowledged eminence justifies their being selected for the distinction. In past times the degree has sometimes been conferred with too great liberality, and it is believed that applications for the honour have not always been looked upon with disfavour. To entertain such applications is to lower the character of the degree. It should be only on persons whom the University itself has selected that the degree should be conferred; and in its selection of them the University cannot be too careful.

A further suggestion, with which, however, it hardly falls within our province to deal, has been made to us in reference to degrees in Law. Both in Edinburgh and in Glasgow the minor degree of Bachelor of Law (B.L.) has been established under certain conditions, requiring in the candidate neither the possession of the M.A. degree, nor so full a curriculum in Law as is required in the case of LL.B. The degree, however, involves attendance on more courses of Law than are required of candidates for admission as law agents; and it has been suggested, that just as the degree of LL.B. is now accepted not only by the Court of Session as qualifying for admission as a law agent, but also by the Faculty of Advocates for admission to the Bar, so the degree of B.L. should be accepted as a qualification for a law agent.

*Graduation in Divinity.*

On the subject of graduation in Divinity, we have not received any suggestions which seem to call for lengthened notice. In some

---

IV. *New Faculties or Degrees.*

---

of the Universities the degree of Doctor of Divinity has in recent years been made attainable by candidates on the production of a thesis to be submitted to and approved of by the University. Various opinions have been expressed to us as to the expediency of this scheme, but in none of the Universities has it been in operation for such a time as to enable a confident judgment to be formed as to its success.

The degree of Bachelor of Divinity (B.D.) is now conferred in each of the Universities after examination. The examination is, as we are assured, purely of a scientific character, its object being simply to test the candidate's due acquaintance with theological learning. Admission to the degree is not fettered by any condition as to a candidate's personal belief; and, as we state subsequently under the head of *Extra-Mural Teaching*, the graduates are not confined to members of the Established Church.

In the University of Edinburgh alone is the examination conducted by examiners in addition to the Professors. We regard the introduction of additional examiners as calculated to raise the character of the degree, and we think the system should be adopted in the other Universities also.

---

IV. THE EXPEDIENCY OF INSTITUTING ANY NEW FACULTIES OR DEGREES.

---

With reference to the expediency of instituting any new Faculties or Degrees, the evidence we have received has related mainly to the questions whether the degree of Bachelor of Arts should be re-instituted in addition to that of Master of Arts, and, if so, under what conditions; whether and under what conditions there should be degrees in Science; and whether a distinct Faculty of Science should be established.

As regards the first of these questions, the degree of Bachelor of Arts was, at the time when the Commissioners under the Act of 1858 were appointed, granted by the Universities of Edinburgh, Glasgow, and St. Andrews after a shorter course of study, and an examination limited to fewer subjects than the degree of Master of Arts. Those Commissioners provided by their Ordinance, No. 14, that this lower degree should not in future be conferred, and in their General Report they state as their reason for the provision, that this practice of conferring an academical degree on persons who had not completed the ordinary course of study they could not but consider as inexpedient and objectionable.

By a considerable number of witnesses it has been urged that

---

IV. *New Faculties or Degrees.*

---

the abolition of the degree of B.A. by the Ordinance has been injurious, that it has removed beyond the reach of many the possibility of obtaining a degree, through the extent of the requirements necessary for M.A., the only degree granted in the Faculty of Arts; and that, to meet the wants of persons who can afford to attend for a part but not the whole of the Arts course, it would be desirable to have a degree on some such footing as that on which the B.A. degree formerly stood, to mark the satisfactory completion of a certain and substantial period of study. This, it is said, would be especially valuable for persons proposing to study Law or Medicine, or to follow commercial pursuits, who seldom have it in their power to devote so long a time to their course in Arts as the degree of M.A. requires. It would also serve an important end as a diploma for teachers, attainable after two or three years' University attendance. The requirements suitable for the degree have been variously stated by different witnesses; but, in general, they may be said to include attendance on five of the seven branches now required for M.A., with examination in the five branches selected,—English, Latin, and Mathematics being made essential.

In opposition to the views thus stated by some witnesses, a large, and, we think, preponderating weight of testimony, has been laid before us to the effect that the introduction of a minor degree in Arts would be hurtful. The main ground for this opposite view is that the institution of a lower degree would tend to the neglect of the higher degree, inasmuch as many students, having no sufficient inducement to proceed to the higher, would rest satisfied with the lower. To meet this objection, it has been proposed by several of those who advocate the restoration of the degree of B.A., that that degree should not confer a qualification for the General Council, and so should not carry the privilege of the University franchise. Such an arrangement, however, would be inexpedient, even if practicable. The Representation of the People Act of 1868 gives the right of membership in the General Council and the franchise to all persons on whom the University may, after examination, confer 'any degree that may hereafter be 'instituted.' It would require therefore a special statutory provision to except the degree of B.A. from this general enactment; and in itself it seems a questionable proposal, that the Universities should institute a degree on which it was thought necessary to throw such an exceptional slur.

The further objection to the proposal has been stated, that as in the Universities of Oxford and Cambridge the degree of M.A.

---

IV. *New Faculties or Degrees.*

---

involves no further examination than that of B.A., and as it is well understood that a Bachelor of Arts in either of these Universities possesses all the educational attainments which the higher degree represents, confusion would be created by the introduction in Scotland of a lower degree which really meant something educationally different from the higher. Perhaps the force of this objection is lessened by the fact, that in the University of London a difference between the qualifications for the two degrees is known to exist, so that there is precedent for such a distinction. But we think that the curriculum on which the proposed degree of B.A. would be conferred would be insufficient, that the character of the degree would be inferior to that of others granted by the Universities, and that it ought not therefore to be instituted. It seems obvious, in our opinion, that there should be no degree conferred by the Universities as to which there is a general and well-grounded feeling that it is unworthy to stand along with other degrees as a qualification for membership in the General Council.

We further think that the object which has been proposed to be met by the institution of the B.A. degree, of enabling many who find the present curriculum unsuited to their professional requirements to obtain a degree in Arts, will be provided for more satisfactorily through the options which we have recommended to be given as to the lines of study leading to the degree of M.A. These options may not indeed apply to the special case of persons, such as teachers, whose attendance at the University is limited in time, and who desire to obtain an academical recognition of their acquirements on a shorter curriculum than is now necessary or than is proposed for the degree in Arts; but we cannot look upon it as the proper mode of supplying this, which we believe to be a felt want, to grant a University degree on inferior or insufficient qualifications. We think that the institution by the Universities of a certificate in Arts, to be granted on the successful completion of such a portion of the curriculum as may be suitable for the position and available to the majority of persons entering the teaching profession, will adequately provide for their special case, while it will not be open to the objection that would attend the granting of a degree on a lower standard than could be regarded as creditable. Such a certificate might also be useful to other persons besides teachers, and might have a beneficial influence as presenting an object towards which, if unable to take the full curriculum, they might be encouraged to direct their studies.

---

IV. *New Faculties or Degrees.*

---

*Graduation in Science.*

Under the head of new degrees it is necessary also to advert to degrees in Science, which have, since the report of the Commission of 1858, been instituted in the Universities of Edinburgh, Glasgow, and St. Andrews, the conditions of the degree varying to some extent in the different Universities. In Aberdeen we believe that as yet no scheme for granting degrees in Science has been framed. Having regard to the advances that have been made in Physical and Natural Science of recent years, and to the importance of scientific study, we think that degrees in Science distinct from the degree in Arts should be established in all the Universities, and that the requirements for the degree or degrees should be made as nearly as possible uniform.

For the degree of Bachelor of Science (B.Sc.), we recommend that there should be a 'First Examination' of a character similar to that required of candidates for the degree of M.A., but in place of Greek requiring either translation from French and German, or translation from one of these languages along with Greek. The subjects of this 'First Examination' would thus be,—Latin, Mathematics, English, French, and German (with the option of Greek for one of these modern languages), and, when practicable, Elementary Science, as explained under the head of graduation in Arts. This examination would be passed at the beginning either of the summer or the winter session; and after passing it the candidate would be required to attend at the University either (1) courses on the subjects included in the fourth or Mathematical Science department for the M.A. degree, and also the additional subjects specified in group 2 of the fifth or Natural Science department for the same degree; or (2) the courses specified in any three of the groups of the fifth or Natural Science department. The final examination would be in the different subjects selected by each candidate according to this scheme.

The degree of Doctor of Science (D.Sc.), which is conferred for excellence in special branches of Science, we think should be maintained on the same footing as that on which it now exists in the University of Edinburgh.

In connection with degrees in Science, the suggestion has been made that a separate Science Faculty should be constituted in each of the Universities, embracing the Professors of those subjects which qualify for the Science degree. This may become necessary as a demand for such degrees extends, but in the meantime we have not had sufficient reasons adduced for the immediate estab-

---

V. *Entrance Examinations.*


---

lishment of such a separate Faculty; and we think that all the objects which we understand to be proposed by those who suggest it may in the meantime be attained by the Professors in question meeting as a committee of the Senatus, and taking into consideration matters relating to the regulations for the degree, and acting along with any other examiners that may be appointed as a board for adjudicating on the merits or success of the candidates.

*Musical Degrees.*

We have had evidence as to the desirableness of giving degrees in Music. While we recognise the importance of this subject in relation to its scientific principles and to its application as an Art, we do not, under the present arrangements for teaching Music in the Universities, make any recommendation as to examining students for a degree in Music or conferring such a degree after examination; but the majority of our number think that in the case of the University of Edinburgh, where there is a well-endowed Chair of Music, degrees might with propriety be given *honoris causa tantum*.

V. THE INSTITUTION OR CONTINUANCE OF ENTRANCE  
EXAMINATIONS.

On the subject of the institution or continuance of entrance examinations a great deal of evidence and a great variety of opinion have been brought before us. There has been a great preponderance of opinion in favour of a conclusion with which we unreservedly agree, that there should not be any examination, the passing of which should be made a condition of admission to the University. To make a rule that failure to pass a particular examination should exclude altogether from the Universities would, in our opinion, be injurious, and not beneficial to the education of the country. Even in the Universities of Oxford and Cambridge, which are not in the same sense as the Scotch Universities the Universities of the people, in other words, which do not draw their students from such an extensive class of the population, there is no excluding entrance examination. At particular colleges, indeed, in these Universities, which desire to preserve a high educational prestige, there are examinations of that kind; but such examinations at particular colleges have not the effect of excluding from a University education altogether; for a student, if rejected, has an opportunity of gaining admission to another college in the University which is not so stringent in its requirements, or may enter the University without being attached



---

*V. Entrance Examinations.*

---

to any college. We are not aware that it has ever been seriously contemplated to establish at the English Universities an excluding entrance examination; and if its institution in them would be attended with risk, the experiment would be much more hazardous in Scotland, where the University attendance is so large in proportion to the population, and where the students vary so much in circumstances, in age, and in the object with which they come to the University. The influence on the national education and the national character which the Scotch Universities have exercised for centuries has been highly beneficial. This has resulted in a great measure from their accessibility to all, even the poorest, classes of the community; and we cannot recommend any change which would diminish their usefulness in this respect.

It would afford no good answer to the objection thus applicable to an excluding entrance examination, to say that the students who might be rejected as incompetent have it in their power and ought to return to school and get their education there, so as to fit themselves for the University standard. It appears from the evidence that most of the students who now enter the Arts classes in a backward condition of education are to be found among the senior students in point of age. It is not uncommon in Scotland for persons who have entered a trade, or who have had little means or opportunity in early life of fitting themselves for higher studies, to resolve to prepare themselves for a profession when it is too late for them to think of going to school, and when to shut the door of the University against them would be to deny them the means of higher education altogether. Cases of this kind are so familiar to all who are acquainted with the circumstances of the Scotch Universities, that in order to meet them various suggestions have been made by those who advocate the institution of an excluding entrance examination; as, for example, that the University Court should be empowered to grant exemption from the examination on sufficient cause being shown. We are satisfied, however, that either the number of cases in which the Court would be called upon to exercise this exempting power would be so great as to lead to the entrance examination being little more than a name, or that, if the Court were chary in its exercise, many deserving persons would be discouraged from proceeding to the University, and the interests of higher education in Scotland would suffer by the Universities ceasing in a great measure to afford an avenue for meritorious talent, as they have long done, with great benefit to the country. It must be observed, that it would not be those alone that were rejected whom the rigid application of such a

---

*V. Entrance Examinations.*

---

system would exclude. The necessity of having to pass an ordeal before admission would of itself operate to prevent many from applying to be admitted, and would check that laudable ambition which has been a characteristic feature among Scotch students.

We do not attach much weight to the argument that an excluding entrance examination at the Universities is necessary in order to improve the secondary education in the schools in Scotland, the view on which this argument proceeds being, as we understand, that any encouragement to the schools to send their pupils to the University in a high state of preparation is taken away or seriously diminished by the readiness of the Universities to admit students, however backward they may be, and that the education at the Universities themselves is necessarily lowered in order that it may be adapted for students received in an insufficient state of preparation. We think that a powerful stimulus to the schools may be afforded by the institution or extension in the Universities of an examination at an early stage of the student's career, without the serious effect of exclusion attaching to a failure to pass it; and, as regards the character of the instruction given by the Professors, we cannot look upon it as a Professor's duty to lower his teaching so as to suit it to the attainments of backward students. His proper course seems to be to maintain it at that standard which he thinks fitting for the University, and to leave any who are insufficiently prepared to derive such benefit as they may from attendance on his class. It seems unnecessary for us to add that the question of an entrance examination cannot be viewed in the light either of the schoolmaster's or the Professor's interest. It is one to be looked at with an exclusive regard to the interests of education in the country. If, looking at it in that light, we saw reason to think that the establishment of an entrance examination as a barrier at the University gate to be passed by every one were likely, on the whole, to be attended with benefit, we should have no hesitation in recommending its institution, whatever effect it might have on incomes derivable from class fees; for any temporary or even permanent loss of income that might result to Professors would in that case have to be made up from other sources. On the other hand, we can hardly be called upon, in the supposed interest of schoolmasters, to shut out from the Universities all who may fail to come up to a certain standard of attainment, if we are satisfied, as we are, that such a step would be injurious to the public interests. At the same time, we think that, not with a view to the interest of either schoolmaster or Professor, but in order to give encouragement to higher education at the schools, and also to

---

*V. Entrance Examinations.*

---

remove any difficulty in the way of the Professors adjusting the instruction given in their proper curriculum classes to a satisfactory and rising standard, it will be right to guard these classes in so far as they are available for graduation by an examination of a similar character, but more general in its application than that now required of students who propose on entering the University to join at once the senior classes of Latin, Greek, and Mathematics, without having previously attended the junior.

By the first section of their Ordinance No. 14, for regulating graduation in Arts, the Commissioners under the Universities Act prescribed a course extending over four winter sessions, and including in it attendance for not less than two sessions on the classes of Humanity, Greek, and Mathematics, but subject to the condition that 'any student who at the time of his entrance to the University shall satisfy the Professors in the Faculty of Arts on examination that he is qualified to attend the higher classes of Latin, Greek, and Mathematics, or any of them, shall be admitted to such higher class or classes, as the case may be, without having previously attended the first or junior class or classes, in the same department or departments.' A further condition was added, entitling a student to complete his course for the degree in three winter sessions instead of four, in the event of his being admitted to the higher classes, both of Latin and Greek, without having attended the junior classes.

By the 2d section of the same Ordinance, it was provided that, in pursuing his course for the degree, no student should be permitted to pass from the junior to a higher class in any department, unless the Professor should be satisfied of his fitness to enter the higher class. In practice, we believe, this provision of the 2d section, whatever may have been the intention of the Commissioners in its enactment, has received little, if any, effect.

A young man coming from school to the University, and proposing at once to enter the higher classes of Latin, Greek, or Mathematics, in proceeding to a degree, is required, under the 1st section, to submit to an examination in order to show his fitness to do so. But if he has been for a session in the junior class, no such examination is required of him, and he may proceed to the higher class without any proof of having made satisfactory progress in the junior. Now, it has been represented to us, and we think with reason, that such an arrangement may operate in effect as an inducement to boys to leave school and go to the University at a stage where the school and the University studies overlap. For a year which, if spent at the junior classes of the University, will be certainly available as a session

---

*V. Entrance Examinations.*

---

towards the degree, will, if spent at school, be unavailable, unless the boy, when he proceeds to the University, shall succeed in passing the examination required of him for entering the higher classes, but not required of his schoolfellow who has gone a year earlier to the University and spent it in the junior. We are of opinion that this arrangement should be altered so as to make it necessary for every one to pass what, under the head of the course of study and regulations for graduation, we have called the 'First Examination,' before any of his attendance shall be reckoned as available for a degree. In this way, without abolishing the junior classes of Latin, Greek, and Mathematics, we would exclude them from the qualifying curriculum. In the present condition of the schools, and with insufficient means of secondary education in many parts of Scotland, it may be expected that for some time, at all events, these junior classes will continue to provide the elementary instruction which they have long given. But, in competing with the education afforded in the higher classes of the schools, they will not have the advantage in their favour of an exemption of their students from a test examination on entrance to the higher classes; and if the time should come when secondary education is made available in the schools throughout Scotland generally, it may be that the attendance in the junior classes, which in some of the Universities is now very large, may become insignificant in numbers, and that the Professors will thereby be left free to devote more time to the teaching of the higher subjects in their departments.

In recommending that all students on entering the senior classes should submit to the 'First Examination,' whether previously educated at the University or not, we imply that the examination should be of an efficient character; and we think that it ought to be conducted, not by the Professors alone, but by the Professors along with the Additional Examiners for degrees. As these Examiners will thus have more duty thrown on them than at present, their remuneration, which is now very limited, being only £80 in each of the three larger Universities, and £50 in St. Andrews, will have to be increased. We think also that, as the 'First Examination' is an additional duty thrown upon certain Professors beyond the proper Faculty examinations, it will be necessary to provide for them a fair remuneration.

As we have already explained, under the subject of graduation, we think that this first examination may, with slight modifications, be made applicable to intending graduates in Science, in Medicine, and in Law.

While we make this recommendation for what is in effect an

---

V. *Entrance Examinations.*

---

extension of the present examination under the Ordinance for admission to the higher classes, we think it right to add that great care should be taken in the introduction of the scheme. We cannot but see the possibility of cases arising where its operation may, unless discretion is used, be productive of evil consequences. In some of the Universities, where the curriculum is at present flexible as to the order in which the classes may be taken, we are aware that it is not unusual for a student, whose early education in Latin or Greek may have been deficient, to begin with classes in the other departments, such as Philosophy or Mathematics, without perhaps any intention of proceeding to a degree, and after a time, on finding that he has been successful in these departments, to study Latin and Greek privately, perhaps during his vacations, and to take these classes last instead of as usual first in his University course, so as ultimately to pass his examination and obtain a degree. Such a student might, by the rigid application of the system of the 'First Examination,' find himself practically excluded from the possibility of a degree through his want of preparation at school; and, in that case, instead of being encouraged, as under present arrangements, to study subjects in which his early education has been defective, it is more than likely that he would neglect them altogether through having no sufficient inducement held out to him for their study. With the view of meeting the case of such students, it may be desirable to provide that, on a student passing the 'First Examination' and producing evidence that he has previously attended and obtained a high position in the examinations of one or more curriculum classes other than the classes of Latin, Greek, and Mathematics, the Senatus may, if they see fit, count his attendance at such classes as *pro tanto* satisfying the requirements of the curriculum for graduation. It may be difficult perhaps to provide for all such cases, but we think that the new system, when introduced, should be applied with some such power of allowance for them, so as to prevent its operating as a discouragement to higher studies.

We have not taken evidence upon the schemes of University Local Examinations which have been for some time in operation in the University of Edinburgh, and have recently been introduced into the Universities of Glasgow and St. Andrews. But if sufficient security were given that the 'First Examination' should be carried on through the agency of the Universities at local centres, by the same examiners and with the same efficiency as within the Universities, it might induce secondary schools to work up to a higher standard than at present, in the hope of pre-

---

*V. Entrance Examinations.*

---

paring a large number of students fitted to enter with advantage on an academic curriculum in the several Faculties.

Before leaving the subject of examinations, we think it desirable to express our conviction that the growing tendency to increase their number, and to regard the passing of examinations as the end rather than as a subordinate means of University education is greatly to be deprecated, not only on behalf of the students, but on that of their teachers also.

As regards the latter, it is to be remarked that the business of an examiner is not one to be taken up lightly, but that the efficient discharge of the functions of that office requires almost as much experience as is needed to make a good teacher; and further, that while the introduction of extra-academical members into the examining body is, for many reasons, desirable, the chief burden of examination must still fall upon the Professors.

The examination of the students of a University for their degrees by the Professors who have taught them is sometimes spoken of as an obvious mistake, if not abuse; but those who are practically acquainted with University work will probably agree with us that the converse proposition is nearer the truth. In fact, it is hard to conceive that an examination in any of the higher and more extensive departments of literature or science can be conducted with fairness to the student, unless the examiners are guided by that intimate acquaintance with the extent and the method of the teaching to which the learner has had access, which is possessed only by the teachers themselves.

Moreover, while we have already expressed a strong opinion as to the desirableness of taking such measures as may secure equivalence of value in the degrees granted by the several Scottish Universities, it must be carefully borne in mind that such equivalence in value does not imply identity of the subject-matter, or in the modes of treating the various topics of examination. It would, we consider, be a misfortune if the separate individuality which has long characterized the Scottish Universities were impaired, and if the spontaneous and healthy development of different schools of thought were rendered impossible by laying an obligation on men of original genius to make their teaching subservient in all its details to the requirements of an extraneous examining authority. The admirable influence which the Scottish Universities have hitherto exerted upon the people of the country has been due not only to the prolonged and systematic course of mental discipline to which their students have been subjected, but to the stimulus and encouragement given to inquiring minds by distin-

---

*V. Entrance Examinations.*

---

guished men who have made the professorial chairs centres of intellectual life; and we cannot think it desirable that any such changes should be made as would tend to lower the Universities into mere preparatory schools for some central examining board.

But if the practice which has hitherto existed is maintained, as we think it ought to be, the multiplication of examinations implies a serious addition to the work already thrown on the Professors; and for this reason, if there were no other, we should think it necessary to keep their number as low as possible. And in drawing up a scheme of examinations, we have had this necessity constantly in view.

With respect to the influence of examinations upon students, we have no doubt that they are useful auxiliaries to instruction, in so far as they oblige a man to find out how much of the information which he vaguely believes he possesses is a definite and readily-producible mental possession. Moreover, examination tests memory and power of book-work, as well as rapidity of penmanship, all of which are more or less estimable faculties, but may be possessed in a high degree by persons of very moderate capacity, while they may be far less conspicuous in real workers and thinkers. Indeed, in view of examination, the man who works that he may know and understand is at a distinct disadvantage compared with him whose whole aim is to learn that he may be able to repeat.

In Science and in Medicine, the introduction of a practical element into examination has done much to diminish the injurious tendencies of the examination system, and it is to be hoped that the authorities of the Universities will see their way to a still larger development of this side of examination.

But it must still be recollected that, for all the higher purposes of education, examinations are at best little better than necessary evils; that in the process of preparing for them, there is a constant and a powerful temptation to forsake the pursuit of well-assimilated knowledge for that of crude and mechanically-gathered learning; and that one of the most important functions of the Universities, as the depositaries and representatives of intellectual interests, is, by precept and example, to keep before the mind of the public the fundamental truth that real knowledge is to be gained only by the steady, calm, and thoughtful labour of minds left free to ponder over each new conception and make it their own,—an intellectual habit which is antagonistic to those acquired in the course of the training of young athletes for competitive combats at present in vogue.

---

*VI. New Professorships or Lectureships.*

---

**VI. THE CREATION OF NEW PROFESSORSHIPS OR LECTURESHIPS.**

On the expediency of instituting new professorships or lectureships in the different Universities, various suggestions have been made to us.

In the University of Aberdeen no new professorships or lectureships have been founded since 1863, when the Commissioners under the Universities Act presented their Report; but in each of the other three Universities there has been an increase in the number of chairs.

In St. Andrews a professorship of the Theory, History, and Practice of Education was instituted by the University in 1876, on an endowment for the purpose being made over to the University by the trustees under the will of the Rev. Dr. Andrew Bell of Egmore. The endowment consists of a capital sum of £4000, the annual proceeds of which, amounting to about £160 a year, are paid to the Professor. The nomination of the first Professor was reserved to Dr. Bell's trustees; and it was provided by the deed of endowment that the patronage should afterwards be vested in the University Court, unless Parliament should grant a supplementary endowment for the chair, in which case the patronage was to be vested in the Crown so long as such supplementary endowment should be continued.

In Glasgow two professorships have been instituted by the University,—viz., a professorship of Clinical Surgery, and a professorship of Clinical Medicine, both in 1874. An endowment of £2500 was provided from private sources for each of these chairs, and the patronage has been vested in the University Court. The chair in each case was instituted by the *Senatus Academicus*, with the approval of the University Court, and intimation of the foundation was made to the Home Secretary. In each case the minute of Senate embodying the resolution to institute the chair, declared it to be the duty of the Professor to teach Clinical Surgery (or Medicine) by means of lectures and other instruction, and embodied, at the same time, a condition that this was to be 'without prejudice to the claims of the other Professors in the Faculty of Medicine to similar teaching.' What are the relative rights of the two Clinical Professors, and of the other members of the Medical Faculty, under the institution of the new chairs with this reservation, has, as the evidence shows, formed, and still forms, a subject of controversy in the University. The differences between the holders of the Clinical chairs on the one hand, and some of



---

VI. *New Professorships or Lectureships.*

---

their Medical colleagues on the other, particularly the Professors of the Practice of Medicine and Systematic Surgery, relate to the questions whether Clinical lectures given at the Infirmary by the Systematic Professors are to be accepted as qualifying courses in Clinical Medicine and Surgery for University degrees equally with those given by the Clinical Professors, and, if so, on what conditions; what are the relative rights of the different Professors in conducting the examinations in Clinical Medicine and Clinical Surgery of candidates for degrees; by whom University honours to the students attending the Clinical classes shall be awarded, and to other matters affecting the rights or interests of the two classes of Professors. The opposing views entertained on these subjects of dispute were fully brought before us, but we have no authority to settle the differences between the parties, and we abstain from expressing an opinion on the merits of them. They fall within the class of questions which, as we have explained, we think the University Court ought to have authority to determine. It is unfortunate that such differences should be allowed to continue. Their existence shows the necessity of caution in the foundation of new professorships, and in particular the importance of seeing that the relative positions of those who are to hold proposed new chairs and the incumbents of existing chairs are well ascertained before new professorships are instituted.

In the University of Edinburgh, four new professorships have been founded since 1863,—viz., a professorship of Engineering, a professorship of Geology and Mineralogy, a professorship of Commercial and Political Economy and Mercantile Law, and a professorship of the Theory, History, and Practice of Education.

Each of these chairs, we are informed, was founded by authority of the *Senatus Academicus*. For the chair of Engineering, which was founded in 1868, there is an endowment of £200 a year, arising from a sum of £5000 given by the late Sir David Baxter, Bart., and in addition a Parliamentary grant of £200 a year. The patronage is vested in the Crown. The chair of Geology and Mineralogy was founded in 1871, and is provided with an endowment of the annual proceeds of a sum of £6000 given by the late Sir Roderick Murchison, Bart., in addition to which there is a sum of £200 a year from Parliamentary grant, and about £20 a year from a fund provided by the late Sir David Baxter. The patronage of this chair also belongs to the Crown. The chair of Commercial and Political Economy and Mercantile Law was founded in 1871, and has an endowment of £450 a year, provided by the Merchant Company of Edinburgh and other

---

 VI. *New Professorships or Lectureships.*


---

Governors of George Watson's and Daniel Stewart's Hospitals. The tenure of office by the Professor is peculiar, the appointment being not, as in all other professorships, *ad vitam aut culpam*, but for seven years, with a recommendation to the patrons in office at the time, that, if at the end of five years the chair has been successful, measures should be taken to place it in the same position as other chairs in the University. That period has now elapsed; but we are informed that the necessary steps for placing the tenure of the chair on a proper footing have not as yet been taken. We are of opinion that no delay should be allowed to take place in carrying out the recommendations made to the patrons when the Professor was appointed. The patronage of the chair is vested in the University Curators and certain representatives of the Merchant Company. The chair of the Theory, History, and Practice of Education was founded in 1876, and was endowed, by the trustees of the late Rev. Dr. Bell of Egmore, with a sum of £6000, yielding an annual income of about £210. The patronage is stated in the returns by the Senatus Academicus to be vested in the Curators of the University; but, from the deed of foundation as set forth in the University Calendar for 1876-77, it appears that there is a similar condition to that applicable to the St. Andrews chair, also endowed by the same trustees,—viz., that, in the event of Parliament granting a supplementary endowment, the patronage shall be vested in the Crown so long as such supplementary endowment is continued.

The University has also accepted an offer of an endowment for a chair of Fine Art, to be called the 'Watson Gordon' chair of Fine Art, from Mr. Henry G. Watson and Miss Frances Watson, in commemoration of their late brother, Sir John Watson Gordon, who was President of the Royal Scottish Academy. The endowment consists of policies of insurance and money to the value of £11,000; but, as the policies are not yet available, the institution of the chair has in the meantime been delayed.

The Senatus Academicus, as constituted with these additions in each of the Universities, consists as follows:—

In St. Andrews of 2 Principals and 13 Professors, or in all of 15 members;

In Glasgow of 1 Principal and 27 Professors, or in all of 28 members;

In Aberdeen of 1 Principal and 21 Professors, or in all of 22 members;

In Edinburgh, at present, of 1 Principal and 36 Professors, or in all of 37 members. The number of members will be 38 when the Watson Gordon chair of Fine Art is instituted.

---

VI. *New Professorships or Lectureships.*

---

In St. Andrews, one of the two Principals, the Principal of St. Mary's College, gives instruction by lectures to the students of theology, being Professor of Divinity as well as Principal. None of the other Principals has teaching duties attached to his office, but some of them give occasional courses of lectures on special subjects selected by themselves.

Besides the teaching given by the Professors, instruction in some branch of Medical Science is given in Glasgow by the holder of the Waltonian Medical Lectureship, on the foundation of the Rev. Dr. William Walton, of Upton, in Huntingdonshire. The lecturer is appointed annually by the Senate, but it is usual to reappoint the same gentleman from year to year. The present lecturer, Dr. Thomas Reid, lectures on the Eye.

In Aberdeen, three of the theological Professors hold *ex officio*, as provided by an Ordinance of the Commissioners under the Universities Act, the lectureships on the foundation of Dr. Alexander Murray of Philadelphia, with the duty of delivering courses of lectures on Sundays during the winter session in the University chapel. There is also, in the same University, another theological lectureship on the foundation of Mr. John Gordon of Murtle, the lecturer's duty being to deliver a course of lectures on Practical Religion. The lecturer is at present one of the theological Professors.

There are no lectureships apart from the professorships, either in Edinburgh or St. Andrews.

We have carefully considered, in regard to each of the Universities, in what respects it may be necessary or desirable to add to the instruction now given by the foundation of any new professorships or lectureships. To some extent, we think additional means of instruction should be provided, partly through new professorships, and partly through new lectureships. We have not, in every case, thought it necessary to recommend that a new subject should be represented by a professorship. In some of the Universities the *Senatus Academicus*, in which the ordinary administration of the University affairs is vested, is already found inconveniently large for the satisfactory transaction of business. It is not, therefore, desirable to increase the number of Professors if it can without disadvantage be avoided. Again, the institution of a professorship, as compared with a lectureship, may in some cases be attended with the difficulty that a professorship is more permanent in its nature than a lectureship, and cannot so conveniently be discontinued, if, after the experience of a certain number of years, it should be found not to be so successful as was anticipated. When, however,

---

VI. *New Professorships or Lectureships.*

---

the subject is of such importance to a large body of the students as to make it reasonably certain that the class will be numerously attended, and where the appointment of a lecturer without a seat in the *Senatus Academicus* would not ensure to the subject its due weight in University arrangements, we have thought it right to recommend the institution of a professorship.

Before going on to state the recommendations we shall make under this head, we desire to call special attention to what is a felt want in most of the Universities, the absence, namely, of any adequate provision for the teaching of history. Save in so far as instruction is given in Church History by the Professor of that branch, who is a Professor of Theology, History is at present altogether unrepresented in any of the Universities except Edinburgh. We regard it as most undesirable that this general defect in the University system should be allowed to continue. In what way we propose that the want should be supplied in each of the Universities we shall explain presently.

In the study of History, the practical alternative still lies between an exact study of very limited periods and a superficial acquaintance with a multitude of disconnected facts, which may be remembered with the help of a *memoria technica*, but are entirely indigestible into wholesome intellectual food. A mere knowledge of dates and names is useless as an instrument of education. Unluckily, it is the form of knowledge most useful for obtaining marks in examinations, and, under the stimulus of the competitive system, is that which is most sought after.

Attempts are made to meet the difficulty by grouping large masses of facts together, and tracing some kind of laws in them—constitutional, ethnological, or philosophical. Theories of this kind are often very ingenious, and will come in time, perhaps, to have real value. But they are at present provisional. We do not as yet know whether constitutionalism, or the progress of democracy, is a process of organization or of disintegration. Wise men differ about this. Still less have the three laws of Comte, or any other suggested laws of historical development, established a claim on acceptance. These suggestions have still to be studied. All sciences pass through analogous hypothetical stages, and, however doubtful or inadequate, some attempt at system is obviously necessary, if examiners are to expect an acquaintance with universal history, or even with the complete history of any single nation.

What is needed is a corrective,—something which will give life and reality to general knowledge, which will illustrate a theory

---

*VI. New Professorships or Lectureships.*

---

when it is a sound one, or limit the acceptance of it when doubtful. A man may study in books the natural system of Botany; he may know the technical difference between endogens and exogens; he may follow, so far as words will carry him, their divergences and points of contact; he may load his memory with names, and be able to arrange each plant of which he reads a description under its proper subdivision; but he only begins to have a real understanding of his subject when he has dissected and examined under the microscope particular specimens for himself. Till he has done this, he is like a deaf man studying the theory of music. Practical observation is an essential part of all botanical instruction which deserves the name.

It is exactly the same with History. By all means let a student have his general surveys. Let him have his national histories and his universal histories shaped in such outlines as the existing state of knowledge allows. Mere summaries can be learnt without severe labour under the guidance of a skilful Professor. But there ought to be at the same time, with those who are making History a real study, an exact acquaintance with some special period or periods. The instructiveness of history lies in the recognition of the varying forces which have influenced human nature at different times. Some features are constant, some temporary and never repeating themselves. The perception of these differences is a form of knowledge of the highest moral and intellectual value, which can be obtained by no other way.

And, as far as may be, the periods selected for special study should be taken from the history of one's own country. We are what we are through the characters which we have inherited; and to know something of our ancestors is a duty which we owe to them and to ourselves. Every educated Scotchman should know all the history of Scotland in outline and should have studied parts of it minutely. And these parts, if they are really to be mastered, must be studied in contemporary writings.

There only the student will find the minds of the men of whom he is reading. Only the men themselves can adequately express their own meaning. The forms of speech, the sentiments, and the language alike illustrate one another, and convey ideas which cannot be gathered elsewhere. In modern books, however able, the old minds have been filtered through the modern mind, and the result has been a new compound.\*

While, therefore, in our opinion the best mode of prosecuting the

---

\* See this argument more fully stated and illustrated in the observations by one of our number, appended to this Report.

---

*VI. New Professorships or Lectureships.*

---

study of History with profit is to trace it in contemporary writings, the necessity of an experienced guide becomes apparent. It can hardly be expected from University students that they should be able to study early authorities on history to advantage without assistance; and we think it therefore indispensable that each of the Universities should be in a position, by professorial teaching, to furnish the necessary aid.

There is another recommendation which we consider of importance as applicable to all the Universities,—viz., that provision should be made for the teaching of modern languages, particularly French and German. For this purpose, we think it will be enough if each University Court grants recognition as lecturers to teachers of these languages, and that it will not be necessary to assign salaries to the lecturers. The fees payable by the students will, in our opinion, afford sufficient remuneration.

In the University of St. Andrews, apart from the general recommendation we have made for the recognition of lecturers on modern languages, we have felt great hesitation, in present circumstances, in making any recommendation for the foundation of new professorships or lectureships. It is true that, in the Faculty of Arts, neither English Literature nor History is separately represented, the former subject being assigned to the Professor of Logic, and the latter included along with Natural History in the subjects assigned to one Professor, the Professor of Civil History and Natural History. It would be desirable that both English Literature and History should be separately represented. But the number of students at St. Andrews is comparatively so small, and has for a considerable time shown so little tendency to increase, that we do not think we should be justified in recommending that provision should be made from the public funds for the teaching of these subjects by the institution of new chairs. We would, however, earnestly press upon the University authorities the importance of themselves making adequate provision for that teaching, if it is at all practicable to do so. In the meantime, we think that for one or other of these subjects an arrangement might be made for assigning it to the Principal of the United College, who has no teaching duties attached to his office at present, and who, as long as there are two Principals in the University, may not unreasonably be called on to take some part in the University teaching. The existing combination of 'Civil History' with 'Natural History,' to which we have referred, is unmeaning, and was, we are informed, rendered necessary by the fact that the chair had for some time in practice been converted into a chair of Natural History, whereas by the

---

VI. *New Professorships or Lectureships.*

---

Act of George II., which united the old colleges of St. Salvator and St. Leonard, its proper title was the 'Professorship of Civil History.' It is probably desirable that it should continue in practice to be a chair of Natural History; and it might be well, therefore, that legislative authority should be obtained for altering the name in accordance with the character of the chair.

It appears from the evidence that has been laid before us, that the inhabitants of Dundee—a large and increasing town, and the seat of many important industries—very naturally desire to bring within the reach of their children an education as good as that which is obtainable by the citizens of Aberdeen, Glasgow, and Edinburgh, and that they would not be unwilling to provide the funds for that purpose. Now that a bridge over the Firth of Tay has been completed, St. Andrews will be within about half an hour's journey of Dundee; and as the University of that place possesses complete Faculties of Arts and Divinity, and the rudiments of a Faculty of Medicine, various projects have been formed for combining the educational resources of Dundee with those of St. Andrews in such a manner as to minimize the loss of teaching power and of endowment which would attend the co-existence of wholly independent teaching institutions at the two places. It might be suggested that the seat of the University of St. Andrews should be transferred to Dundee; but to this course there are so many objections, both sentimental and practical, that it is probably not worth detailed consideration. The proposal to transplant the oldest University of Scotland from its ancient site is hardly likely to be received with much favour. Any such transfer would involve the sacrifice of the large capital represented by the present University buildings; and it may be justly urged that the quiet and retired situation of St. Andrews renders it much better fitted than the thickly-populated and busy town of Dundee for the residence of students who do not belong to the locality. Another conceivable plan is to strengthen the University of St. Andrews by the addition of new chairs in Science and in Medicine, and to enlarge its buildings in accordance with their wants. But it cannot be denied that the distance between Dundee and St. Andrews, small as it is, would interpose serious obstacles in the way of the attendance of students from Dundee, who might not desire to go through a complete curriculum in Arts or Science, and that this difficulty would be especially felt in the case of medical classes, on account of the necessary separation between the hospital and the school. Moreover, it is doubtful whether those wealthy citizens of Dundee who might be willing to contribute largely to

---

*VI. New Professorships or Lectureships.*

---

the establishment and support of an educational institution in Dundee itself would be equally ready to supply funds for the enlargement of St. Andrews. A third alternative is the institution at Dundee of a college which should be affiliated to the University of St. Andrews, and stand in the same relation to it as the College of St. Mary and the United College do at present. Such a college would contain a complete set of chairs of Arts, of Medicine, and possibly of Law; and the Professors would be members of their respective Faculties in the University of St. Andrews. This plan has the advantages of getting over the difficulty of distance; of completing the organization of the University of St. Andrews, and rendering needless its present anomalous power of granting degrees in a department in which it is not in a position to afford full instruction; and of giving the people of Dundee everything they can want in return for their contributions. The chief disadvantage would be the reduplication of the Arts chairs; and, unless it were found possible to devise some plan by which the work of the Arts classes could be carried on both in Dundee and in St. Andrews under the superintendence of the same Professor, this objection appears to us so serious as to be fatal to the scheme. Finally, it has been proposed to establish at Dundee a college affiliated to the University of St. Andrews, and the Professors of which should be members of the Faculties of Arts and Medicine of that University, but which should be devoted entirely to the Mathematical and Physical and Natural Sciences, and to Medicine, leaving the literary moiety of the Arts Faculty in St. Andrews. Considering the importance of applied science to the great industrial interests of Dundee, we cannot doubt that advantage would be largely taken of the opportunities for instruction in Chemistry, in Engineering, and the like, which would be afforded by such an institution to persons who, for want of time or other reasons, might be unable to go through the whole course required for a degree in Arts or Science. On the other hand, those who have the means and leisure to pass through the curriculum, either for the Arts degree or for the Science degree, would probably find the short distance between Dundee and St. Andrews no serious obstacle to obtaining their instruction in Arts at the latter place. On the whole, we are inclined to think that the best solution of the difficulty would be found in the adoption of some such plan as that last indicated.

In the University of Glasgow, we recommend that three new professorships should be instituted,—viz., a professorship of History,



---

*VI. New Professorships or Lectureships.*

---

a professorship of Geology and Mineralogy, and a professorship of Pathological Anatomy; and, in addition, three lectureships,—viz., on Public or International Law, Civil Law, and Mental Diseases.

We think it of great importance, particularly for the students in the Faculties of Arts and Law, that this University should be provided with a Professor of History, who should be a member of each of these Faculties. He should be required to give lectures such as to qualify students preparing for graduation in the Law and History department for the M.A. degree, and also such as to qualify students in Constitutional Law and History who are studying for degrees in the Faculty of Law. Whether these would require to be separate courses, or might be combined, might be left for regulation by the University Court; but probably it would be necessary, for the convenience of the law students, that the course qualifying for Law degrees should be in the summer session. Even for students in Arts this might also be more convenient than in the winter session, when their time is much occupied with other classes. If that were the case, one course of lectures might possibly suit both classes of students.

The teaching of geology and mineralogy at present belongs to the department of the Professor of Natural History, which also includes zoology. The branches of geology and zoology are not so intimately allied as to make it reasonable to expect that one man should be eminent in both; and both sciences have, in modern times, undergone so great development that it is desirable they should be separately represented in the University. We think, therefore, that a separate professorship of Geology and Mineralogy should be founded, and these branches dissociated from the chair of Natural History, as was done in Edinburgh in 1871. Some adjustment may require to be made as to the existing duties and emoluments of the present Professor, and probably a contribution towards the salary would have, as in the case of the professorship of History, to be provided from the public funds. When this is done, the patronage of the chair should be vested in the Crown. The professorship of Geology and Mineralogy would be a chair in the Faculty of Arts.

A professorship of Pathological Anatomy is required, in the Faculty of Medicine, for the efficient instruction of the students in this important branch. At present the teaching is provided through the recognition by the University Court of two lecturers outside the University, who are pathologists respectively to the two city infirmaries, the Western Infirmary and the Royal In-

---

*VI. New Professorships or Lectureships.*

---

firmary ; but the expediency of having the teaching attached to and under the control of the University has been strongly pressed upon us, and, we think, on just grounds. The subject is one of the prescribed branches of study, under the regulations for medical graduation as sanctioned by Your Majesty in Council, and is too extensive and important to admit of its being treated successfully as an incidental subject by the Professor of the Institutes of Medicine, or any of the other Professors to whose departments it is allied. In Edinburgh there is a special chair of General Pathology, but the evidence satisfies us that the better title for the chair is Pathological Anatomy. That, we think, should be the title of the chair in Glasgow, and probably it would be desirable that the name in Edinburgh should be changed. The name ' Pathological Anatomy ' implies that the teaching should be essentially demonstrative and practical, as the best medical authorities assure us it ought to be. The means for such practical instruction can be had only at a hospital or infirmary, and hence it will be necessary, if the chair is founded as we recommend, that some arrangement should be made securing to the Professor access to the materials of instruction which an infirmary affords. An arrangement of this nature might, we hope, be made with the managers of the Western Infirmary. This institution is in the immediate vicinity of the University, and closely connected with it, having been included along with the University as an object contemplated in a joint scheme of subscription, when funds were raised a few years ago for the erection of the University buildings on their new site. Perhaps the most satisfactory arrangement might be, that the Professor of Pathological Anatomy in the University should also be Pathologist to the Western Infirmary. At all events, some security for the right of access to the Infirmary for teaching purposes ought to be obtained before the chair is founded, for without such access little practical benefit would be derived from its institution.

The number of students in the Faculty of Law in Glasgow is so considerable, and has for some time exhibited so steady an increase, that we think the teaching should be strengthened by the institution of lectureships on Public or International Law and Civil Law. Both of these subjects are required for the degree of Bachelor of Laws (LL.B.), a degree which qualifies both for a call to the bar in Scotland, and also for admission as a law agent ; but, at present, there is no adequate provision for instruction in them afforded by the University. In Public Law, indeed, there is no provision for permanent instruction, and we think this is a want which ought to be supplied. We have received a representation from the

---

*VI. New Professorships or Lectureships.*

---

Senatus Academicus expressing concurrence in a memorial from a number of the law students that a professorship of Public Law should be founded to provide the necessary teaching; but we are not disposed to recommend that, in the first instance, the office should be of a higher nature than a lectureship. For the institution of a lectureship, a smaller salary than for a professorship will probably suffice, and, if it should be found not to succeed, the appointment may be discontinued. On the other hand, if it should be successful, it may be erected into a professorship at a future time. There is some encouragement to hope that this may be the case in the fact that, during the summer session of 1877, when, as a temporary arrangement, the Professor of Public Law in Edinburgh agreed to deliver a course of lectures in Glasgow, his class was attended by forty-nine students. On Civil Law lectures have been delivered occasionally by the present Professor of Law, the arrangement stated in the Calendar being that a class of Civil Law is formed in alternate sessions. The Professor, however, is mainly occupied with giving instruction to the students in Scotch Law; and that is so wide a subject, that he cannot be expected at the same time to discharge adequately the duty of teaching Civil Law. We think, therefore, that there should be a separate lectureship on this branch. For each of the lectureships on Public Law and Civil Law, we think that a salary of £150 should be provided.

Our attention has been called by several witnesses to the importance of mental diseases as a distinct subject of study. The treatment of these diseases, if it falls properly within the functions of any of the medical Professors, seems naturally to belong to the department of the Professor of the Practice of Medicine, and in its juridical aspect the subject may be noticed by the Professor of Medical Jurisprudence. But none of the medical Professors can be expected to devote to it that special attention which its acknowledged importance deserves; and although, looking to the large range of study required from medical students, we should not be disposed to insist on their attending a course of lectures on the subject as a condition of graduation, we think that they ought to have an opportunity of studying it if they desire, seeing that cases of insanity may come before them professionally, whether in their private practice or in the course of public duties imposed upon them under the Lunacy Acts. We recommend, therefore, that a lectureship on Mental Disease should be established in the University. We do not think that a professorship is required, or, indeed, would be desirable.

---

*VI. New Professorships or Lectureships.*

---

Some witnesses have represented it to us as desirable that chairs of Education should be founded in Glasgow and Aberdeen, as has been done from private endowment in Edinburgh and St. Andrews. Others, again, have expressed doubts as to whether such chairs are likely to be successful, unless combined with some practical training of the students in methods of teaching. At present the chairs in Edinburgh and St. Andrews are attended by a small number of students, but we believe that the Government have lately passed regulations calculated to increase the attendance of Queen's scholars at the Universities, to whom these classes will be of advantage. As, however, chairs of Education are a recent and somewhat experimental institution, we refrain from making any special recommendation in regard to them.

In the University of Aberdeen we recommend the foundation of professorships of History, of Geology and Mineralogy, and of Pathological Anatomy, under similar conditions to those we have stated in reference to the University of Glasgow, and for the same reasons. We also recommend the foundation of a professorship of the English Language and Literature, and that that subject should be disjoined from the department of the Professor of Logic. Both in Edinburgh and in Glasgow there is a chair of English Literature, and in both the class is numerous and successful. The number of students in Aberdeen, and the flourishing condition of the Faculties both of Arts and Medicine, fully justify, in our opinion, the foundation of these additional chairs.

With regard to the professorship of Geology, it is possible that the present Professor of Natural History, to whom, as in Glasgow, both geology and zoology are assigned, might prefer to devote his attention to geology rather than to zoology. It would seem reasonable that, if his chair is virtually separated into two, he should have his election which of the two branches he should teach.

We recommend that there should be in Aberdeen, as in Glasgow, a lectureship on Mental Disease.

The number of law students in Aberdeen is not large, and there is no ground for expecting any considerable increase; hence we do not think we should be justified in recommending any further addition than the chair of History already mentioned. The Professor of Law is required by Ordinance to deliver two courses of lectures, one on Scotch Law and the other on Conveyancing; and we are informed that, although the lectures are given not by the Professor himself, but by another gentleman as his deputy, the class is admirably taught. Such an arrangement, however, is undesirable, and unjust to the gentleman by whom the duties are

---

*VI. New Professorships or Lectureships.*

---

performed, and should be immediately put an end to. It has been suggested that, when a new appointment to the chair is made, the Professor should be required, in addition to the present courses, to lecture also on the History and Principles of the Civil Law; and, if there should appear to be a prospect of the course being fairly attended, we think it would be well that he should do so.

In Edinburgh there is not so much necessity for the institution of new chairs as either in Glasgow or in Aberdeen. We think, however, that the present professorship of History, which is one of Constitutional Law and History, and is properly a Law chair, ought to be supplemented by a new chair of History in the Faculty of Arts. In the event of this separate chair of History being founded, the Professor of Constitutional Law and History should cease to be a member of the Faculty of Arts, and the subject and name of his chair should for the future be Constitutional Law only.

We have already stated that we think the name of the chair of General Pathology in Edinburgh should be changed to Pathological Anatomy, as better indicating the aim and character of the chair.

We recommend, also, that there should be a lectureship on Mental Disease, as in Glasgow and Aberdeen.

We have been pressed, by some gentlemen interested in the Faculty of Medicine, to recommend the institution of a separate chair of Clinical Medicine in Edinburgh. They represent it as desirable that there should be some one professor whose duty it is to give to the students clinical instruction in Medicine, as is now the case in regard to Surgery. A different view, however, has been expressed to us by many witnesses, to the effect that the present arrangement is preferable, under which any of the medical Professors in Edinburgh who please teach clinically in the Infirmary. By this arrangement, it is said the Professors have the advantage of illustrating their teaching in the class by reference to actual cases seen by the students, and the students are also benefited by having experience of the practice of different physicians. Without deciding between these opposite views, we do not think sufficient ground has been shown for the institution of a separate chair of Clinical Medicine. The present arrangement has lasted for many years, and has been attended with success. No difficulty has been experienced in finding several of the Professors ready to give clinical instruction, and, if any such difficulty were likely to arise, a remedy might be found in making it the duty of certain of the Professors. The embarrassment which has arisen in Glasgow from the foundation of the clinical chairs there, discourages us from

---

 VI. *New Professorships or Lectureships.*


---

recommending that there should be any alteration in the system which has worked well in Edinburgh.

It is probable that a professorship of the Celtic Languages and Literature will before long be instituted in the University of Edinburgh. Mainly through the efforts of Professor Blackie, subscriptions to the amount of about £10,500 have, we believe, already been obtained for this object; and it is understood that when a sum of £12,000 has been collected, it is contemplated to make it over to the University for the foundation of the chair.

In Edinburgh there is a professorship of Practical Astronomy, as there is also in Glasgow,—the Glasgow chair having been founded in 1760, and that of Edinburgh about the year 1786. According to the present arrangements of the curriculum in Arts, attendance is not required on the lectures of either of these Professors; but, according to the scheme of alternative departments which we recommend for the degree of M.A., scope for the study of the science of Astronomy will be afforded in the department of Mathematical Science. In Glasgow at present, the Professor, who is also ‘Observer in the University of Glasgow,’ and whose engagements in that capacity are close and continuous, is accustomed to give a course of lectures in each year at the University, with an average attendance, as he informs us, of about ten students. The Professor in Edinburgh is also Astronomer-Royal for Scotland, and the announcement under the head of the chair in the Edinburgh University Calendar for 1877–78 states that he ‘has in consequence  
 ‘daily duties of a very onerous character, and wholly unconnected  
 ‘with the University, to perform throughout the year in the Royal  
 ‘Observatory, Edinburgh, on the Calton Hill. Nor has this chair  
 ‘ever been taken up by the University authorities and made  
 ‘necessary for graduation in any of the Faculties, nor supplied  
 ‘with sufficient apparatus, nor shown at any time to have a sensible  
 ‘and proper amount of demand for it among the students in  
 ‘general of the University. Hence the present Professor  
 ‘Astronomer-Royal, after having voluntarily tried the experiment  
 ‘of giving a course of Practical Astronomy lectures, and kept it  
 ‘up for several laborious years, whenever there were only two  
 ‘students to hear, has limited himself to *receiving* (on a day  
 ‘announced in the University Calendar) any matriculated appli-  
 ‘cants for Practical Astronomy, ascertaining their calibre and  
 ‘objects, and then advising or assisting such gentlemen afterwards  
 ‘in their studies at various periods throughout the session, according  
 ‘to circumstances, and hitherto gratuitously. Nor can he now, in  
 ‘the enlarged sphere of his public duties at the Royal Observatory,

---

VI. *New Professorships or Lectureships.*

---

'devote more of his time to extraneous occupations, without that Government office committed to his care suffering serious damage.' Our attention was called by the Principal of the University of Edinburgh to the fact that, in discharge of their duties under sec. 12, subs. 3 of the Universities Act, 'to require due attention on the part of the Professors to regulations as to the mode of teaching and other duties imposed on the Professors,' the University Court had been in communication with the Professor of Practical Astronomy, and had put it to him whether he could not lecture, and that he had replied that it was not his duty to do so. The Principal added that the Professor had very much resented the interference, and that nothing had come of it, except that the Court had made a statement of what they considered to be his position. The Professor himself did not appear to give evidence before us, although afforded an opportunity of doing so. There may perhaps be a delicacy in exerting the authority of the Court in the case of a gentleman who has held office, as the Professor has, since 1846; but, as to the fact of their authority over him, we should think there can be little doubt. When a new appointment to the chair, however, comes to be made, it might be well to place the jurisdiction of the Court over the Professor beyond question by the terms of his commission. It is not desirable that any Professor should hold office in the University without an obligation to take part in the duty of lecturing, if occasion for his doing so should arise, as is likely to be the case with the Professor of Astronomy, when our proposed regulations for graduation in Arts may come in force.

In Aberdeen and in St. Andrews the instruction in Physical Astronomy, which we contemplate, may be given by the Professor of Natural Philosophy. We do not think it necessary in either of these Universities to recommend the foundation of a new chair to provide that instruction.

In connection with the difficulties which have attended the recent institution of clinical professorships by the University of Glasgow, we have pointed out the importance of caution on the part of the University authorities in exercising the right of instituting new chairs. That this right belongs to them, we are not disposed to question. It seems to have been exercised at different times by different Universities without objection. The institution of a new professorship, however, is so serious a step in various aspects, that we are of opinion that it would be well to surround it with greater checks than are now afforded by the concurrence of the University Court in a resolution of the Senatus. When an offer of an endowment for a professorship is made, the University authorities are

---

*VI. New Professorships or Lectureships.*

---

naturally indisposed to reject it, or to consider very narrowly the balance of advantage or disadvantage to arise from the proposed foundation, or the sufficiency of the endowment which is offered. The refusal of the gift might be thought ungracious, and, if any prospect of benefit from it to the University can be shown, the misgivings of those who doubt its utility or foresee danger from accepting it are made to yield, and a step is taken which the University has no power afterwards to recall. From the increasing number of benefactions which are now being directed to the Universities, and which we acknowledge as a satisfactory sign of the interest taken by the public of Scotland in their prosperity, it may be anticipated that offers of endowments for new professorships are likely to be more numerous in future years than they have been in the past. Some of these may be highly beneficial, while others may be of doubtful expediency; and, to ensure that no chair shall be founded without a full and unprejudiced consideration of the probable consequences of its institution, and of the conditions under which its institution, if resolved on, should be sanctioned, we think that some check on the power of the Universities to establish new chairs should be provided by legislation. We recommend, accordingly, that it should be provided that, in every case of a proposal to establish a new professorship, there shall be laid before the General Universities Court, which we have proposed should be instituted, a detailed statement or report regarding it, including an explanation of the nature of the chair, of the amount of endowment, of the patronage, and of the conditions and duties to be attached to it, and that the proposal shall not be capable of receiving effect until its sanction by the General Court is communicated to the University.

It may be right for us to add, that the objections we have stated to the present freedom of founding new chairs on the part of the Universities do not, in our opinion, apply to the case of lectureships. The institution of these does not involve the same consequences as the institution of professorships, and in many respects it may be advantageous for the Universities to be unfettered in their power of extending and strengthening their means of instruction, by the appointment of lecturers on particular subjects which may not be sufficiently represented in the University. A lectureship, as we have indicated, is not necessarily an office of a permanent nature; it need not be for life, or, indeed, even for any long period.



---

VII. *Assistance and Apparatus.*

---

## VII. THE PROVISION OF ASSISTANCE AND APPARATUS FOR ANY PRESENT OR FUTURE PROFESSORS OR LECTURERS.

We have considered with much care the important subject forming the seventh head of our inquiry, viz. the provision of assistance and apparatus for any present or future Professors or Lecturers.

The Commissioners under the Universities Act made provision by their Ordinances for assistance and apparatus in certain classes in each of the Universities of Glasgow, Aberdeen, and Edinburgh, the provision being furnished partly from the University funds and partly from moneys voted by Parliament.

In St. Andrews the Ordinances contained no regulations on this subject, but the University was left free to provide for assistance and apparatus where it might appear to be wanted, and in so far as the University funds could afford. From this source there have been provided an annual allowance of 100 guineas towards the class expenses of the Professor of Chemistry, and an allowance of £65 towards those of the Professor of Natural Philosophy. The latter allowance, with the interest of a sum of £1000 given by Mrs. Neil Arnott for the promotion of the experimental study of Natural Philosophy, brings up the total provision to the Professor to about the same amount as that allowed by the University to the chair of Chemistry.

In each of the Universities of Edinburgh and Glasgow the Ordinances make provision for a salary from the public funds of £100 for an assistant in each of the classes of Latin, Greek, Mathematics, and Natural Philosophy, and of the same amount for each of two assistants—the one a teaching, and the other a laboratory, assistant—in the class of Chemistry. They also made provision from the same source for a salary of £50 to a joint-assistant to the Professors of *Materia Medica* and Medical Jurisprudence; but this sum has since been divided between the two chairs, so as to enable each Professor to have a separate assistant. The Ordinances further provide from the University funds in each of these Universities an annual allowance for apparatus or class expenses of £100 to each of the Professors of Natural Philosophy and Chemistry, of £50 to the Professor of *Materia Medica*, and of £35 to the Professor of Medical Jurisprudence. For the chair of Anatomy in each of these Universities, a sum of £200 is directed to be provided annually from the University funds towards defraying the salary of a demonstrator and other class expenses.

In Aberdeen the arrangements made by Ordinance were generally the same as those just stated in regard to Edinburgh and

---

VII. *Assistance and Apparatus.*

---

Glasgow, subject to the exception that the salary of £100 each to assistants in the classes of Latin, Greek, Mathematics, and Natural Philosophy is provided from the University funds instead of from Parliamentary vote; that the laboratory assistant to the Professor of Chemistry receives a salary of £50 instead of £100; and that the provision made for the chair of Anatomy is a salary of £100 a year to an assistant from Parliamentary vote, instead of an allowance from the University funds of £200, as in Edinburgh and Glasgow, for a demonstrator and class expenses. In Aberdeen, as in these Universities, the allowance of £50 for a joint-assistant to the Professors of *Materia Medica* and Medical Jurisprudence has subsequently been divided, so as to provide separate assistants to these professors. It need not be said, however, that an allowance of £25 thus provided for an assistant is quite inadequate in amount.

The allowances thus made by Ordinance of the Commissioners have, in the University of Edinburgh, been supplemented to a considerable extent, and additional assistance furnished from the University funds. Thus, in the Faculty of Arts, each of the Professors of Logic, Moral Philosophy, English Literature, and Engineering has been provided with an assistant. In the Faculty of Law, similar assistance has been given to the Professors of Scots Law and Conveyancing; and in the Faculty of Medicine each of the Professors now has an assistant. The allowances, however, provided for the assistants are generally insufficient, although probably as large as the University funds can fairly afford.

Neither in Glasgow nor in Aberdeen has the University been able to strengthen the teaching in a similar way. In Aberdeen it may be that in some of the classes the numbers of the students are not so large as to render it necessary; but in the Faculty of Medicine the present assistance is inadequate, and ought to be supplemented. In Glasgow additional assistance is largely required; and but for the difficulties in which the University is placed in regard to funds, and which have been forcibly pressed upon us by several witnesses, we cannot doubt that it would have been afforded.

It would be impossible, in our opinion, to over-estimate the importance of aiding the Universities in the performance of their functions by the provision of additional teaching power, whether tutorial or practical. In some branches tutorial assistance is much needed to enable the system of written class-examinations to be satisfactorily conducted and extended, and to bring forward the less advanced students in large classes; while in the departments of Science it is essential that the means of practical instruction should be largely increased.

---

*VII. Assistance and Apparatus.*

---

It is now universally admitted that no instruction in Natural Science can be regarded as efficient, either as a means of conveying exact information or as a form of mental discipline, unless it is to a large extent practical. Lectures, however good and however well illustrated by experiments or illustrations, and reading, however extensive, cannot give the student that reality, precision, and fulness of knowledge which he obtains by making an experiment or a dissection, or studying a specimen for himself.

With the first attempts to improve medical education, it was discovered that a book knowledge or lecture-room knowledge of Anatomy was of very little use to the surgeon; and the attempt to teach Anatomy without a dissecting room, a supply of subjects, a collection of anatomical preparations, and the provision of assistants or demonstrators to supervise the course of practical instruction, and to give each student the personal attention required by beginners, would now justly be considered absurd. These adjuncts to the chair of Anatomy are rightly regarded as indispensable.

The introduction of practical teaching in connection with other branches of Natural Science is of later date. But, at the present time, practical instruction in Chemistry, in Natural Philosophy, and in Botany, and to some extent in Zoology and Geology, is obtainable at the majority of the Scottish Universities; and there is reason to believe that want of the needful accommodation and funds is the sole obstacle in the way of the organization of a complete system of laboratory work in all branches of Natural Science taught in these Universities.

We therefore consider it desirable that arrangements should be made for practical instruction in connection with every chair of Natural Science, by the provision of funds for the payment of assistants, the purchase and maintenance of collections of apparatus and specimens, and by affording space in the University buildings for laboratories and museums.

In regard to the latter, it may be remarked that, while it is highly desirable that teaching collections should be provided and maintained, we do not think that it is expedient that a University should charge itself with the heavy expense involved in forming and keeping up a large general museum.

In applying the principles which we have explained, we have not seen our way to recommend that an allowance should be made, or that an existing allowance should be increased, to any particular class on the mere ground of the large number of students attending it. We think it not inequitable that, where a class is very large, the expense of additional assistance should be borne by the Pro-

---

*VII. Assistance and Apparatus.*

---

fessor. The large income from fees, which the size of the class brings with it, is fairly a source from which the assistance may be provided.

In the case of many of the scientific classes, however, this rule cannot be applied. It is not from the size of the class, but from the nature of the subject, that the necessity of assistance arises; and without assistance it may be impossible to conduct the teaching properly, although the income from fees may be small, or not more than moderate.

Some of the scientific Professors have given a very large estimate of the amount that should be provided for purposes of assistance and illustration. For example, the Professor of Natural Philosophy in Glasgow, Sir William Thomson, has placed the requirements of that class for assistance at a minimum of about £750, and for apparatus and materials for illustration at a further sum of about £200, making in all a claim of nearly £1000 a year; whereas all the allowance now provided is £100 a year for an assistant from Parliamentary vote, and £100 a year from the University funds for apparatus and class expenses.

We have endeavoured, as far as possible, to arrive at a just estimate of the requirements of different chairs for these purposes; and, having done so, we recommend that the following provisions, in addition to those now existing, should be made from the public funds. In each case we have stated the lowest sums which we think will be required. The recommendations apply to each of the three Universities of Edinburgh, Glasgow, and Aberdeen.

To the chair of Natural Philosophy there should be attached a first assistant with a salary of £250 a year, in addition to the present mechanical assistant at £100 a year.

To the chair of the Institutes of Medicine or Physiology, there should be two assistants, one at a salary of £150, and the other at £100. There should further be an original allowance of a sum of £1000 for the purchase of apparatus and material of a permanent kind, and afterwards an annual sum of £100 for maintenance and for provision of new material.

To the professorship of Botany two assistant demonstrators should be provided, if the class numbers as many as a hundred, the services of one demonstrator being necessary for about fifty students. In so far as additional demonstrators beyond two may be required, in consequence of the size of the class, we think that they should be provided by the Professor himself. The demonstrators are required to aid the Professor in illustrations in the laboratory and also in field work. Their salaries should be £100 each.

---

VII. *Assistance and Apparatus.*

---

In Edinburgh, and also in Glasgow, there is a botanic garden which is available in connection with the teaching of the class.

In Edinburgh the garden is public property, and the Professor is regius keeper of the garden. The class-room, which is at the garden, and is under the charge of the Board of Works, requires development, the number of students having for some years been about 350, whereas the room is seated only for 220. There is also a want of proper rooms for laboratory work. There is fortunately ample space for extending the present buildings so as to provide the necessary accommodation, and its provision is urgently required.

In Glasgow the botanic garden is the property of a private company of subscribers; but, in respect of the University having in 1817 given a subscription of £2000 towards its formation, the Professor of Botany has a right to the use of a lecture-room in the garden. The lecture-room, however, is small, and quite inadequate for the wants of the class; so that the teaching is now always conducted at the University, which in its present site is only about half a mile distant from the garden. Neither at the University nor at the garden is there sufficient accommodation for laboratory work or for the class herbarium. The garden has never received any aid from Government, and is much in need of support, the directors (of whom three are appointed by the University) having a constant struggle to maintain it even in its present insufficient state, there being a debt of considerable amount over the property. The directors are not in a position, nor, indeed, can they be reasonably expected, to provide additional accommodation for teaching the class, or for the herbarium. To provide the necessary accommodation, either at the garden or at the University, a grant from the public funds would be required. It would probably be the most convenient arrangement, that the accommodation should be provided at the garden; but, should there be difficulty in applying public money towards buildings to be erected on a site belonging to a body of private subscribers, we recommend that aid should be given to the University to enable it to extend the University buildings for the purposes of the herbarium, and as far as necessary for laboratory accommodation.

In Aberdeen there is at present no botanic garden. We have not, however, received any representation to the effect that the arrangements for teaching the class of botany are defective.

To the chair of Natural History (Zoology), we recommend the like provision of assistants, and under similar conditions to the provision we have specified in the case of Botany,—viz., two assist-

---

VII. *Assistance and Apparatus.*

---

ants at £100 each, on the footing of the class numbering 100. If the class exceeds that number, any further necessary assistance should be provided by the Professor. There should be attached to the class a laboratory for the instruction of the students, and also a class museum, for the original cost of which an allowance of £500 would be required; and for the yearly maintenance of the museum an allowance of £50 should be made. We have already expressed our opinion that a University should not undertake the heavy expense of maintaining a general or public museum.

To the chair of Geology which now exists in Edinburgh, and to each of the chairs of this branch which we have recommended should be founded in Glasgow and in Aberdeen, there should be an assistant at a salary of £100. A laboratory for the instruction of students and a class museum should also be provided, the latter at an original cost of about £250, and with an allowance of about £25 for annual maintenance.

To the chair of Pathological Anatomy there should be an assistant with a salary of £100.

To the chair of the Practice of Physic there should be an assistant at £50 a year. •There should also be a clinical tutor to aid the Professor or Professors engaged in clinical instruction at the infirmary. His salary should be £50.

For the two chairs of the Practice of Physic and Pathological Anatomy there should be provided a class museum, which might be maintained at an annual cost of £100.

To the chair of Surgery, and also to the chair of Clinical Surgery where that exists, an annual allowance of £50 for the purchase and maintenance of instruments and mechanism should be made. There should also be a clinical tutor, at a salary of £50, to assist the Professor or Professors engaged in clinical instruction at the infirmary.

In other respects, we think that the existing provisions for assistance and class expenses to particular chairs may, in the meantime, be allowed to stand as sufficient, subject to the following explanation regarding the chair of *Materia Medica*, for which a larger allowance for assistance may be required, if an instructor in Pharmacy should be attached to the chair as a first-class assistant.

Under present arrangements, the holder of the chair of *Materia Medica* is required to deal with two subjects which differ very much in importance and have no necessary connection with one another. The first of these is Therapeutics, or, as Sir Robert Christison has proposed to term it, 'Therapeiology,' and the second is Pharmacy.

---

*VIII. Length of University Sessions.*

---

Therapeiology embraces the study of the influence of conditions upon life. So far as such conditions come under the head of climate, station, atmospheric conditions, zymotic agents, diet, and regimen, they should be treated so as to form a scientific basis for the study of Hygiene; while the action of medicaments on the economy is the subject of Therapeutics in the stricter sense.

There can be no doubt that Therapeiology, as thus defined, is one of the most important branches of medical study, and that it has the strongest claims upon the attention of the student. We therefore consider that a full winter course of lectures should be devoted to it, and that the teaching of Therapeutics and the scientific principles of Hygiene should be the chief, if not the only, duty of the Professor of Therapeiology. This is of more importance now that the Universities give certificates or Science degrees in the department of Public Health. While the Professor of Therapeiology would teach the scientific principles of Hygiene, the Professor of Medical Jurisprudence would continue, as at present, to apply these principles to the Hygiene of communities, and to the action of the law in relation to them.

Pharmacy treats of the physical and chemical character of medicaments, and of the means of ascertaining their purity; explains the sources from which they are derived, and the modes of preparing them; and gives instruction in the art of compounding medicines from them. Essentially a practical subject, it can be taught efficiently only in a properly-constituted pharmacological laboratory, where the students can examine and prepare the objects of their study under the personal guidance of a competent instructor, aided by an assistant and by a practical dispenser.

The instructor in pharmacy might either be a first-class assistant attached to the Therapeiological chair, or a separate lectureship on the subject might be instituted. But in the latter case it must be clearly understood that the chief duty of the instructor is not lecturing, but practical teaching.

The course need not be of more than three months' duration.

**VIII. THE LENGTH OF THE UNIVERSITY SESSIONS, AND THE EXPEDIENCY OF INTRODUCING ANY CHANGES IN RESPECT TO THESE.**

On the subject of the length of the University sessions, and the expediency of introducing any changes in respect to them, we have received evidence from a number of witnesses. At present there

---

*VIII. Length of University Sessions.*

---

are two sessions in each of the Universities of Glasgow, Aberdeen, and Edinburgh, a winter and a summer session. In St. Andrews there is a winter, but no summer session. The winter session in each of the Universities extends from about the end of October or beginning of November to the beginning or end of April, embracing a period of about six months, with a break of a week or ten days at Christmas, and in some of the Universities one occasional holiday in each of the months after Christmas, but with no other interruption. The summer session lasts from about the beginning of May to the end of July, or for about three months. There is teaching in all the Faculties in the winter session, but in summer the teaching is for the most part confined to certain of the classes in the Faculty of Medicine, and in Edinburgh to certain of the law classes. In the Faculty of Arts the Professors do not teach during the summer, although lately attempts have been made in Edinburgh, and also in Glasgow, to utilize this part of the year for instruction by means of tutorial classes superintended by assistants, or fellows to whose tenure of office teaching duties are attached. In Edinburgh this system has been in operation for about ten years, and the attendance has steadily increased, consisting mainly of students resident in Edinburgh.

By some witnesses the view has been pressed upon us that these arrangements should be altered, and that the teaching by the Professors in Arts should be made to extend through the summer session. This view is advocated both on the ground that it is undesirable to leave the students free from regular University work for so long a period as half the year, and also because, it is argued, the course for a degree might be shortened by about a year if a larger portion of the year were spent at the University under the Professors. Another aspect of the same view, which, however, would not make the teaching extend over so long a period, has been presented to us in the shape of a suggestion that the Arts session should be divided into two parts, one to begin with the beginning of October and last till Christmas, and, after an interval of about a month, the second to begin about the end of January and last till about the end of May. This suggestion corresponds in some degree to another which has been made to us by some gentlemen interested in the Medical Faculty, that the medical year should be made to consist of two terms, each embracing four months' teaching,—viz., a winter session, extending from the beginning of November to the end of February; and a summer session, from the beginning of April to the end of July. The ground of this change is stated to be, that for some of the summer courses



---

VIII. *Length of University Sessions.*

---

the present summer session of three months is too short, while for some of the winter courses the period of five or six months now assigned to them is said to be too long.

On the other hand, a great and preponderating weight of evidence has been brought before us to show that the present arrangements, when fairly and strictly carried out, are the most suitable and the best for the interests of both Professors and students. In the Faculty of Arts, some students, especially the less advanced, may feel a want of the means of instruction during the summer vacation. But while this want may be properly met by the institution or extension of the system of tutorial classes, we do not think it would be desirable to make the period of the Professors' teaching in any substantial respect longer than according to present arrangements it is.

We hold this opinion in some degree in the interest of the Professors, and with a regard to the character of the men by whom the chairs of the Scotch Universities are to be filled. The emoluments of few of these chairs make them great prizes in a pecuniary sense to men of education; and in the case of most of them, and certainly of those where the incomes are considerable, the pressure of the work during the winter session is constant and severe. The summer vacation is required not merely for rest and relaxation, but to afford time for independent study and original research.

A consideration of the interests of a large proportion of the students also leads us to the same conclusion. It is well known that a great number of the students in the Scotch Universities are of slender means, and that it is a struggle for many of them to maintain themselves at the University even with the session at its present length. Many more than might be supposed are engaged, even while attending the University during the winter, in other occupations, while others trust to the summer vacation for gaining the means of continuing their University studies in the following session. Without saying that the present arrangement of the academical year is the best that could be devised, it is that which long experience has shown to be most suitable to the circumstances of Scotland. Nor is it without its advantages for the purposes of study. To the well-advanced and intelligent student the vacation affords an opportunity for reflection and self-culture, so as to prevent his University education from degenerating into a mere acceptance of facts and conclusions from the mouth of his teacher. For a student, indeed, who is backward or indolent, the leisure afforded by the long vacation may be useless or hurtful.

---

VIII. *Length of University Sessions.*

---

But to meet the case of such students the fitting remedy is that which we have already stated, the institution of summer tutorial classes where these do not now exist, and their extension, if necessary, where they do.

As regards the suggested division of the medical year into two equal sessions of four months, instead of, as at present, a winter session of five months and a summer session of three months, the opinion generally expressed to us has been, that the existing arrangement is preferable in various respects. While an equal division might give more scope to certain subjects, the course on which is now limited to three months, it would be unsuitable for others, for which a four months' course would be insufficient. On the whole, we have come to the conclusion that it would not be expedient to introduce the proposed change.

While, however, we are thus of opinion that no serious alteration in the present arrangement of the University sessions is desirable, we think, at the same time, that care should be taken not to admit of any encroachment upon them, either at the beginning or the end. We think that, in those classes in which there is no summer session, such as most of the classes in Arts, the winter session should be kept at the full length of six months, and that attendance for any materially shorter period should not be accepted for any University purpose. In some of the Universities, the matriculation lists are kept open for weeks after the nominal commencement of the session; while, in the latter part of it, students are given their certificates, on application, a considerable time before it closes. Again, examinations for degrees are allowed to take place in November after the session has commenced, and also in the spring some time before its proper termination. While these examinations are going on, the work of the classes must necessarily to some extent be interrupted, not merely in consequence of the Professors being engaged in examination work, but also by the withdrawal from the classes of the students who are undergoing examination. We think it right to point out that any arrangement, by which the examinations are held while the work of the winter session is still nominally proceeding, does not seem to be in accordance with the requirement in the Ordinance of the Commissioners under the Universities Act, by which it is directed that the examinations shall take place at such convenient time 'after the close' of the winter session as the Senatus Academicus may appoint. The Commissioners did not fix a time for examinations about the beginning of the session, but, where these have been instituted, the same reason which requires the spring examinations to be held after the close

IX. *Extra-Mural Teaching.*

of the session makes it desirable that those in the autumn should be held before the work of the session has begun.

In connection with the length of the session, we find it necessary to notice an arrangement lately adopted in one of the medical classes in the University of Aberdeen, which we feel satisfied the authorities of that University will, on consideration, direct to be discontinued. By the Ordinance regulating graduation in Medicine in Aberdeen, it is provided (as is also the case in Edinburgh and in Glasgow) that, among other courses, a candidate must show that he has given attendance on a course of *Materia Medica* and Pharmacy, including not less than one hundred lectures. It is not in terms provided that more than one lecture shall not be given in one day, although it cannot be doubted that that was the intention of the Ordinance, and in every other case where a similar provision has been made it has been so understood and applied. But in the class of *Materia Medica* at Aberdeen a different view has been acted on, and an arrangement made whereby the lectures are delivered during two hours a day, so that the course of a hundred lectures, instead of extending over the full period of the winter session, is allowed to be completed within the three months' course of the summer session. In this way an *annus medicus*, or medical session of a year, which the Ordinance declares shall be constituted by at least two courses of not less than one hundred lectures each, or by one such course and two courses of not less than fifty lectures each, is allowed to be constituted during one summer session by attendance on the *Materia Medica* course of one hundred lectures delivered twice a day, and two other three months' courses. This arrangement, whether literally a compliance with the terms of the Ordinance or not, is so manifestly at variance with its spirit, that we cannot doubt it will be discontinued when the attention of the University authorities is called to it.

## IX. THE RECOGNITION OF EXTRA-MURAL TEACHING, AND THE CONDITIONS UNDER WHICH SUCH TEACHING SHOULD BE RECOGNISED.

Under the head of 'the Recognition of Extra-mural Teaching, and 'the conditions under which such teaching should be recognised,' we understand it to have been intended that we should consider the operation of the present system, under which attendance on the lectures of teachers outside the University is allowed to qualify for graduation in Medicine—whether that system should in any respect be restricted, modified, or extended, and whether and, if

---

IX. *Extra-Mural Teaching.*

---

so, under what conditions it should be made to apply to graduation in other Faculties.

The recognition of attendance on lectures elsewhere than within the University has long prevailed in the Faculty of Medicine in the different Scotch Universities. A candidate has not been required to show that he has passed the whole of his course of study in the University to which he applies for a degree, or even that he has taken such portion of it as may not have been spent in that University at another University in Scotland. Attendance in the hospital schools of London, and elsewhere, has been accepted, and all the attendance required within the University in which a student seeks to graduate, is one out of the four years of medical and surgical study necessary for the degree. Nor is it in schools at a distance alone that attendance is accepted as qualifying. In the University of Edinburgh, under a system which has now lasted for a number of years, and which was in effect continued under certain conditions by the Ordinances of the Commissioners under the Universities Act, the lectures of teachers of medicine in the city of Edinburgh, although unconnected with the University, are recognised for the purposes of graduation to the extent of one year of the curriculum, or four of the prescribed departments of medical study. Further, in the case of any repetition of attendance on a particular branch, which is often desirable, the whole of such additional attendance may be given beyond the walls of the University.

Except in regard to the clinical courses, which necessarily depended on the arrangements made by the directors of the city infirmaries, and so were generally beyond the control of the University authorities, this system of recognising extra-mural teaching within the University town itself did not exist either in Glasgow or in Aberdeen prior to the regulations introduced by the Commissioners' Ordinances. In Aberdeen, although made competent by the Ordinance No. 16 for regulating graduation in that University, it has not even now been established, and perhaps can hardly be expected to exist under present circumstances, seeing that the city is not sufficiently large to afford scope for rival teaching, and that there is no medical corporation within the city to give it encouragement. In Glasgow the case is different. The Faculty of Physicians and Surgeons of that city grants licences for medical practice independently of the University, and the population is so large as to present an ample field for the labours of several teachers in most of the branches of a medical education. Accordingly, under the powers vested in the University Court by the 15th

---

*IX. Extra-Mural Teaching.*

---

Ordinance, recognition has been accorded to the lectures of various private teachers within the city; and it is reasonable to hope that the competition which the Professors of the University must thus be prepared to meet, may be attended with the like beneficial results which have been found to follow in Edinburgh from the similar system which has long prevailed there.

The stimulus, indeed, to medical education and the advantage to the University school itself which such a system of rivalry, when applied within reasonable limits and with discretion, is calculated to afford, are generally recognised by the most competent judges. Not even by the Professors, who might be supposed to look upon competition with disfavour, have we been urged to recommend the abolition of the system, or its restriction within narrower limits than at present. By a few witnesses, on the other hand, it has been represented that these limits might be extended; and it has even been said that it would be well that there should be no limitation whatever to the number of classes that may be taken extra-murally, and that no portion of the curriculum should necessarily be attended within the University. In this view we do not agree. It is a feature of the Scotch University system, and, in our opinion, a highly valuable feature, that the Universities teach as well as examine for their degrees; and we do not think that, consistently with the preservation of their character in that respect, the conditions under which extra-mural teaching is now admitted could safely be relaxed. These conditions we believe to be as liberal as those of any University which is not merely an examining body.

In the Faculties of Divinity in the different Universities, extra-mural teaching is admitted for the purpose of qualifying candidates for graduation. So long as a candidate has taken his Arts course at the University, his course in theology is accepted as qualifying for the degree of Bachelor of Divinity (B.D.), although that course may have been taken in a Theological Hall outside the University. This liberal arrangement has, no doubt, arisen from a desire on the part of the Universities to make their degrees in Divinity accessible not only to students of the Church of Scotland, but also to those of non-established churches who may desire the distinction of a degree; and we believe that to a considerable extent advantage has been taken of the arrangement by members of more than one of these churches. Professor Dickson, the Professor of Divinity in Glasgow, stated (Q. 1934) that in that University, while the majority of the graduates belonged to the Established Church, there was still 'a very considerable number of dissenters,

---

 IX. *Extra-Mural Teaching.*


---

‘and of various kinds of dissenters.’ This is understood to be the case in the other Universities also. As we have already stated, the examination for the degree is purely of a scientific character, and such as to test the candidate’s due acquaintance with theological learning; and his admission to the degree is not fettered by any condition as to his personal belief.\*

In the Faculties of Arts and Law, except in so far as attendance at one University is admitted as qualifying, to a certain extent, for graduation at another, there is not at present any recognition of extra-mural teaching. The course of study must be taken in University classes under the Professors, in order to entitle a student to proceed to a degree. We have given anxious consideration to the question, and much evidence bearing on it has been laid before us, whether the system of extra-mural teaching should be extended to these Faculties, and particularly to the Faculty of Arts. By those who advocate its application to these Faculties, the precedent of the arrangements in the Faculty of Medicine has been strongly pressed upon us; and it has been represented, with force, that what has succeeded so well in that Faculty may reasonably be expected to prove equally beneficial to the education in other Faculties. The undoubted advantage attending it, that, should there happen to be an inefficient Professor within the University, the student is provided with an alternative class outside, has been dwelt upon; and it is argued that it may be desirable, in some cases, to give a Professor the incentive to exertion which the necessity of competing with an extra-mural rival affords. On the other hand,—confining our observations for the present to the Faculty of Arts,—it is said that the objects proposed in the instruction given in the Faculties of Arts and Medicine are not the same. The primary object of the teaching in the former Faculty is culture, in the latter to impart information. Hence, while it may not be very material for the University in the one case to inquire where a candidate has acquired his information, provided he gives proof that he possesses it, the mere test of an examination in the other is not sufficient to show that the student has cultivated his faculties in that way which it is the aim of his University training to ensure. Moreover, it is said, the establishment of extra-mural competition would tend to influence injuriously the character of the Professor’s teaching. At present that teaching is not limited to what is necessary to prepare students for the degree, and is not even directed to that as its main object. It is raised

---

\* The returns show that in the last ten years 15 degrees of B.D. have been granted in St. Andrews, 57 in Glasgow, 31 in Aberdeen, and 105 in Edinburgh.

---

*IX. Extra-Mural Teaching.*

---

considerably above the degree standard, and has never been cramped by a regard to the examination. But, were there to be rival teaching for the degree, were there to be a competition for students between the Professor inside and lecturers outside the University walls, and if, as might be expected, some of the outside lecturers were to seek a reputation of being successful in preparing their pupils speedily for the examinations, and to shape their teaching to that end, the Professor might be tempted in self-defence, and in order to prevent his students from deserting him, to follow a similar course. The evil effects of what is expressively termed the 'cramming' system might be apprehended, and the examinations would come to have that narrowing influence on the University instruction which hitherto they have not had in Scotland, and the existence of which in some quarters elsewhere has been deplored.

After weighing with attention these opposite views, we have come to the conclusion, that it would not be expedient to introduce the system of extra-mural teaching into the Faculty of Arts. We have arrived at this opinion not in the interest of the Professors, but of the character of the University teaching. There is no doubt that the incomes from class fees of some, at least, of the University Professors would suffer were the change introduced. However excellent their teaching might be, there would always be a certain number of students who would be attracted to the outside teachers. But compensation for any loss of fees would form a necessary condition of the introduction of the system, so that we have not been moved by a consideration of that loss in arriving at a conclusion. The main argument that has weighed with us has been that which we have explained, that a cramping effect on the education given in the Universities might be anticipated.

On this subject the opinions expressed to us by many witnesses are deserving of weight. The Rev. Dr. Lindsay Alexander, for example, said (Q. 5637), 'There is no doubt this to be said in favour of extra-mural teaching, that by competition the students might have the advantage of receiving the instructions of a superior man outside the college to what might be found inside; but I think there are disadvantages on the other hand. When subjected to competition, men are tempted rather to lower the standard of their teaching than to elevate it.' Again, Professor Blackburn, in replying to the question (Q. 8631), 'Is not competition a good thing?' said, 'No; there is a great fault in competition. What would it be competition for? Simply for coaching men to pass a certain examination. The result of that would be

---

IX. *Extra-Mural Teaching.*

---

‘that the Professor would either be outbid, or he would take to cram for the examination; and it is utter ruination to a man to teach for the purpose of making his students pass an examination. I have got extracts from different places on the subject, and the best opinion everywhere is to the effect that teaching for the special object of examination is utterly bad.’ Among other witnesses to the same effect, we may refer to the evidence of Mr. John Kerr. Being asked (Q. 8907) what his objection was to extra-mural teaching, he replied, ‘It would tend to produce cram. The end and aim of the extra-mural teacher would be to make the students pass the examination, and he would be apt to disregard the culture that underlies mere knowledge; and that is not the case in most of our chairs.’ (Q. 8908.) ‘I suppose you think the Professor in self-defence would be obliged to do the same?’ ‘He would be tempted to do the same. The teaching of our University chairs is higher a good deal than the examination.’

In the views stated by these witnesses we fully concur. We think the statement is justified, that at present the teaching of the Professors is considerably beyond the requirements for the degree; and any step that would tend to lower its character ought not, in our opinion, to be taken without its appearing that the advantages it holds out are such as to compensate for the evil.

The most weighty argument on the other side of the question is that founded on the case of an inefficient Professor, to whose teaching it may be desirable to have an alternative course open to the students outside the University. But cases of inefficiency in Professors are not frequent; and we hope and believe that they are even less likely to occur under the present constitution of the Universities, than they have been in the past. Considerable changes have been introduced in the system of patronage; and the establishment of retiring allowances for aged and infirm Professors removes to a great extent the inducement to men to cling to their chairs after their energy has gone, from which in former times the Universities suffered. It is true that the present scale and conditions of retiring allowances are not so favourable as fully to meet that evil, but we trust that they may be placed on such a footing as to reduce it to very small proportions.

Our opinion therefore is, that extra-mural teachers should not be allowed to compete with the Professors in the curriculum classes which qualify for the degree in Arts. It will be kept in view that, as regards the instruction given in the junior classes of Latin, Greek, and Mathematics, the fullest competition will be allowed between the Professors and teachers of schools by the



---

IX. *Extra-Mural Teaching.*

---

requirement which we propose, that no student shall be admitted to the senior class in any of these branches, with a view to graduation, without having passed the 'First Examination,' whether his education may have been taken at school or in the junior classes of the University.

Considerations of a somewhat similar character to those which we have stated as applicable to the Faculty of Arts apply to the Faculty of Law in this matter. The aim of a University training in law is rather to give a broad and scientific character to legal education than to prepare students for passing examination. We believe that it has generally succeeded in that aim, and it would not, in our opinion, be desirable to introduce a change which might present an inducement to Professors to give their teaching a less liberal direction.

It will be understood that, while we are unable to recommend the introduction of extra-mural teaching in the Faculties of Arts and Law by way of competition with the Professors, the observations we have made do not in any respect apply to the recognition or appointment of lecturers in any Faculty on subjects not represented in the University, or not so fully represented as may be desirable. On particular branches, it may often be highly advantageous to encourage men who have made them their special study to deliver lectures to the University students; and this may be done most effectually by granting them recognition as University lecturers on such branches.

The subject of extra-mural teaching has been presented to us by some witnesses in a different aspect from that which we have been considering. This new aspect relates to a proposal for the extension of teaching by the University Professors to persons not members of the University, rather than to the admission of outside teaching of University students to qualify for University purposes. It has been represented to us, that it might be desirable to require or to encourage the Professors to give the benefits of literary and scientific instruction to many who, either from want of means or from their engagements in other pursuits, cannot become University students, but to whom it might be an advantage to have an opportunity of profiting by the instruction which University lectures afford. A scheme of this nature was instituted tentatively by some of the Professors of St. Andrews lecturing in Dundee during the winter of 1875-76. The success attending this attempt was considerable; the audiences were large, and the interest taken in the lectures was evinced by many of those who attended submitting to examination, and showing that

---

*X. Election of University Officers.*

---

they had profited considerably by the instruction. The lectures, indeed, were of a somewhat popular character; and probably it could not be expected that, were the instruction to assume a more systematic form, the attendance would be so large. At the same time, the experiment is encouraging; and in other places also, as in Glasgow and Aberdeen, the importance of extending the benefits of University instruction and examination to other than University students has been strongly pressed upon us. It has been further said that, to enable the instruction to be such as to afford a satisfactory training in particular branches, it would be desirable to obtain aid from the public funds to assist the Universities in taking action in the matter; but it is obvious that it is essential that a sufficient amount of local co-operation should be secured before either University or public aid is afforded.

We are sensible of the importance of the subject which was thus brought before us; but we do not conceive that it falls within our province to express an opinion regarding it, or to say how far it might be practicable for the Professors to engage in such external teaching consistently with their primary duties to the Universities. We are satisfied that the 'recognition of extra-mural teaching,' mentioned in Your Majesty's Commission, refers to the recognition of teaching outside the University for University purposes, and not to extra-mural teaching by the Professors to persons who are not University students.

**X. REGULATIONS AS TO TIME, PLACE, RIGHT, AND MANNER OF PRESENTING AND ELECTING ALL UNIVERSITY OFFICERS.**

Under the tenth head of our inquiry, viz. 'Regulations as to Time, Place, Right, and Manner of presenting and electing all University Officers,' most of the evidence that has been presented to us has related to the election or appointment to professorships. Suggestions have also been laid before us in regard to the election of Rector, particularly in those Universities where the mode of election is by the students voting in nations; and, as to other offices also, we have received evidence on various points falling under this head.

The Act of 1858 transferred to the University Court the right of nomination to any professorships, the patronage of which had previously been exercised by the Senatus, or by any of the professors or officers of the University. In the University of Edinburgh, the appointment to a considerable number of the chairs

---

*X. Election of University Officers.*

---

had been vested in the Town Council of the city, and the right of nomination to these was given to a special body of seven Curators—four nominated by the Town Council, and three by the University Court. In Aberdeen, the union of the two Colleges required that special arrangements should be made in regard to rights of patronage; and, accordingly, the Commissioners under the Act were empowered to determine in whom for the future the patronage should be vested, ‘having regard, as far as possible, to ‘the preservation of the existing rights of patronage.’ In discharge of this duty, the Commissioners ordained that the patronage of certain chairs should belong to the Crown, of others to the University Court, and of one, that of Divinity, to a body composed of certain representatives of the Synod of Aberdeen and of the University. In no other respect were the Commissioners authorized to interfere with the right of nomination to chairs in any of the Universities.

With regard to the patronage which has been vested in the University Courts, we think the evidence shows that it has been exercised in a satisfactory manner. It is generally admitted that these bodies have, in making appointments, endeavoured to secure that the candidate selected should be the best man for the office. It has, indeed, been suggested that in some cases local influences have been brought to bear upon the members of Court, and that arguments of a theological kind have been used to bias their judgment in appointments to chairs not in the Theological Faculty. It cannot be said, however, to have been shown that their decisions have in any way been influenced by considerations apart from their duty as patrons, and certainly no ground has been afforded for the conclusion that they should be deprived of the patronage which the Act gave them.

In Edinburgh University, part of the patronage of professorial chairs is vested in the Court of Curators. This Court is at present constituted of four representatives of the municipality and three members nominated by the University Court. We think it might be desirable to add one representative of the General Council of the University, and one to represent science and learning. The latter might be the President of the Royal Society of Edinburgh for the time being.

In making appointments to professorships, the University Courts act through those present at a meeting, choosing the candidate who may, in the opinion of the majority, be the most eligible. Voting by proxy or by voting letter is not admitted, the votes only of those who are present being reckoned in the election. This

---

*X. Election of University Officers.*

---

seems to us the proper, and probably the only legitimate, course for the Court to follow. It has the obvious advantage of enabling the members to interchange confidentially up to the moment of election their views or information regarding the different candidates.

The practice of the Curators in Edinburgh, in exercising the patronage vested in them, has been different. Votes of absent members have always been admitted by letter addressed to the Secretary, and it is stated to be the opinion of the Curators that they have no power to prevent any of their number from voting in that way. We are of opinion, however, that it would be desirable that they should follow the same practice in elections as is observed by the University Court.

The patronage of the professorial chairs is divided as follows :—

51 chairs are in the patronage of the Crown.

20 chairs are in the patronage of the University Courts.

16 chairs are in the patronage of the Court of Curators of Edinburgh.

8 chairs are in the patronage of the Curators in combination with other public bodies.

5 chairs are in the patronage of public bodies, such as the Faculty of Advocates.

3 chairs are in the patronage of private patrons (the Duke of Portland, Marquis of Ailsa, and Earl of Leven).

It will be observed that the Crown possesses a large amount of patronage in the Universities. It cannot be doubted that, in advising as to its exercise, a Minister of the Crown acts with a desire to be free from local prejudices or partialities. At the same time, it must be very difficult for a Minister to obtain ample and trustworthy information as to the needs of the University in which a chair is vacant, and as to the qualifications of the numerous candidates who apply in case of a vacancy. Numerous testimonials are generally sent in by each candidate. The manner in which testimonials are too often collected has become a scandal to those who give them and to those for whom they are given, and the testimonials themselves are untrustworthy as to the ability or qualifications of the candidates. The Minister of the Crown has therefore in them no information on which he can rely in making a recommendation to Your Majesty. He is obliged to obtain personal evidence of the sufficiency of the candidates, and this is not unfrequently given under political bias. Representations are made to him by members of Parliament, who may be guided more by political considerations than by the interests of the Universities.

---

*X. Election of University Officers.*

---

In London, the University College and King's College have followed a course in regard to candidates for professorial chairs which, when applied with the necessary modifications to the Scotch Universities, would seem to offer a valuable mode of conveying trustworthy information to the Minister of the Crown, or to the public bodies entrusted with the exercise of patronage. Each candidate should be requested to furnish a statement of his qualifications, and of any works he may have published, and deposit this evidence with the secretary of the University. The documents should be transmitted to the Senatus, who should then appoint a committee of members, not confined to a single Faculty, to consider and report upon them. The report should be full, and contain the reasons for preferring one or two of the candidates, and should be accompanied by the detailed reasons of dissent of any members who do not agree to the recommendations of the committee. The Senatus should consider, and either confirm the report or give reasons for its dissent and for any recommendations which it might offer, the minority of the Senatus having the right to state their views. These detailed reports, with the reasons of dissent, if any, should be transmitted to the University Court for consideration, and be forwarded by the Court to the Minister of the Crown, with any observations which the Court might desire to make. The patronage would rest wholly with the Crown, as at present; but the Minister would be able to make his recommendations with the fullest information as to the interests of the University.

Public bodies entrusted with the patronage of chairs have as much need of a responsible analysis and sifting of the qualifications of candidates as a Minister of the Crown. The same informatory method should therefore be pursued in regard to all chairs in the gift of the University Court, the Curators, or public bodies. The Senatus would in all these cases only be an intermediary for collecting and reporting on the evidence of qualifications supplied, while the actual patronage and responsibility would rest as at present. The reports of the Senatus ought to be full and frank, and therefore should be treated as strictly confidential, and would necessarily be given under a deep sense of responsibility for the welfare of the University.

In St. Andrews, three of the chairs in the United College are in the gift of private patrons. The professorship of Humanity is in the patronage of the Duke of Portland, that of Civil and Natural History in the patronage of the Marquis of Ailsa, and the professorship of Chemistry in that of the Earl of Leven. This has been represented to us as a serious evil; the patrons are

---

*X. Election of University Officers.*

---

not in any respect bound to consult the University as to the appointments, and in making them, it is said that they often act without any communication with the University whatever. It is acknowledged that, in particular instances, good appointments have been made; but the general result is said to be unfortunate, men of ability and distinction being deterred from offering themselves as candidates for the chairs, apprehending that private interest and not merit may weigh in the appointment. The public confidence in the University is said to be diminished through the uncertainty as to who may be chosen to fill one of these chairs should it become vacant; and some of the Professors hold the opinion that the fortunes of St. Andrews might have been different from what they are, had the University been freed from this fetter. With these views we strongly sympathize. It is an anomaly that three out of the nine professorships in the United College, the Arts College and the more important of the two in the University, should be in the gift of private persons. Nothing similar exists in any of the other Universities, and we think that, if practicable, some arrangement should be made whereby the patronage may be transferred to other hands. Each of the chairs is supported partly by endowment and partly by annual Parliamentary grant, and the patronage might appropriately be vested either in the Crown or in the University Court.

In Edinburgh, a peculiarity in regard to the position of the patronage of the professorship of Botany has been brought to our attention. The Professor of Botany holds two commissions, one as Professor from the Town Council of Edinburgh, now represented by the Curators, and the other from the Crown, as 'Regius Professor of Botany in the University of Edinburgh,' with 'the oversight, care, and direction of the Royal Botany Garden established at Edinburgh.' To this latter office a salary of £100 was attached; but this salary seems to have been transferred by Ordinance of the Commissioners under the Universities Act to the professorship in the gift of the Curators. We have already stated that the work of the class is conducted at the Botanic Garden, which is the property of the Crown, and not at the University; and, indeed, the garden is essential to its proper teaching. Were a vacancy to occur, the Curators might appoint one gentleman to the University chair, and the Crown another to the regius keepership of the garden, and injury might result to the University school. To prevent this, it has been suggested, and seems desirable, that the patronage of the professorship should be transferred to the Crown, so as to unite the two offices under

---

*X. Election of University Officers.*

---

one commission; and, if it were thought necessary, the patronage of some other chair, now vested in the Crown, might be given to the Curators in exchange.

When the Act of 1853 for regulating admission to lay chairs in the Scotch Universities, 16 and 17 Vict. cap. 89, was passed, a declaration was substituted for the test previously required. This declaration has been objected to by two witnesses (Professors Nichol and Edward Caird, of Glasgow) as unnecessary; and should any Act be passed to carry out the views recommended in this Report, it has been proposed by some of our number that this declaration should be altogether abolished; but the majority are not prepared to recommend any alteration of the existing law on this subject.

In the case of lectureships, which we have recommended should be instituted for certain subjects, we are of opinion that the right of appointment should be vested in the *Senatus Academicus*.

With regard to the election of Rector, some witnesses have expressed the opinion that it should be taken from the students and transferred to the General Council. Many of the students, it is said, are too young to have such an important trust committed to them; the election and the preparations for it interfere with work and good discipline, and tend sometimes even to generate bad feeling within the University. A less radical change has been suggested by others, whereby the election should not be taken from the students altogether, but should be entrusted to a limited portion of their number, the junior or first year's students being excluded. This exclusion of first year's students would, it has been said, operate to prevent persons from matriculating and taking a class ticket with the view merely of voting in the election, as we are told has sometimes been done. This latter proposal to disfranchise the junior students we cannot regard as practicable. Any measure of disfranchisement that could be introduced with reference to any of the students must, we think, extend to all; and, as regards the alleged manufacture of votes which this partial measure is specially intended to meet, we cannot believe it to be of so serious a nature, if it exists, as to necessitate the disfranchisement of all the first year's students as a special expedient to prevent it. Nor do we think that expedient calculated in itself to answer the proposed object.

The proposal to transfer the election altogether from the students to the General Council receives a certain degree of support. There is no doubt that the election causes considerable excitement among the students, and, in the year in which it occurs, it has been

---

*X. Election of University Officers.*

---

stated that, until the election is over, the work of the session is unsatisfactory and exposed to serious interruption. This evil may be reduced to a minimum by having the election at a very early period of the session. In some of the Universities, it could be fixed with advantage a good deal nearer the beginning than at present. In St. Andrews, for example, the election is as late as the fourth Thursday of November, and in Aberdeen it does not occur till December. It is said, indeed, that, if it is made very early in the session, at least too early to allow sufficient time for the students after they come up to arrange who are to be proposed for the office, the result may be to throw much of the preliminary agitation into the previous session, causing distraction at a time when it is of importance that the University work should be uninterrupted. It seems, however, that the period of about a fortnight from the beginning of the session, which is now given in Glasgow and in Edinburgh, is sufficiently ample for any necessary preparations for the election. If, indeed, it should appear that the disturbing elements of electioneering were to be transferred to a previous session, occasion might be given for considering whether the students should continue to possess a right, the exercise of which was shown to interfere so seriously with University work. But, in the meantime, it has not, in our opinion, been established that the evils attending the election are such as to call for a measure to deprive the students of a privilege which it is believed they highly value, and which in some of the Universities has long formed a prominent feature of University life.

In two of the Universities, Glasgow and Aberdeen, the election is by the students voting in four nations, each nation having one voice in the election. This arrangement, which is a continuance of old usage, results not infrequently in a tie in the election,—two nations being for one candidate, and two for another,—so that the casting vote of the Chancellor of the University has to be called in. Dissatisfaction among the students against whose candidate the Chancellor's vote is given, and who may possibly be a majority of the whole students, has occasionally arisen in consequence; and it has therefore been suggested as desirable that a change in the system of election in these Universities should be effected. Some witnesses, reluctant to abandon the ancient form of nations, suggest as a remedy the creation of five nations instead of four; while others propose that the four nations should still be retained, but that, when they are equally divided, the election should be determined by the absolute majority of students. The most simple remedy, undoubtedly, is to put an end to the system of nations, and to



---

*X. Election of University Officers.*

---

make the election depend on a poll of the whole students, as is the case in Edinburgh and in St. Andrews. On the whole, we think this proposal the most satisfactory, and recommend that it should be adopted.

The casting vote in the election of Rector, given to the Chancellor, to which we have referred, has been thought by some persons to be an anomaly, he being an officer elected not by the students, but by the General Council, and it being said, therefore, that a more natural person to whom to entrust the deciding vote would be the previous Rector, according to the practice which existed in Glasgow before the Act of 1858. The previous Rector, however, has sometimes been himself one of the persons nominated, and in such a case it would hardly be suitable to give him the casting vote. If, as we recommend, the system of nations be abolished, the occasions on which the exercise of a casting vote will be required will be so very rare, that it is not of great importance with whom it lies; but we think that no good reason has been shown for altering the present rule.

We have intimated our opinion that the election of Rector should be fixed at an early date in the session, with the view, as far as possible, of avoiding interference with University study. It follows, from the same consideration, that an extraordinary election should not be allowed to take place on any other day than the day fixed. Should, for example, a person be elected who should afterwards decline the office, a new election should not be allowed till the recurrence of the stated day at the beginning of the next session. This rule, indeed, may in its operation leave the University without a Rector for about a year; but, with the University Court increased in numbers, as we propose, and with the previous Rector's Assessor holding office till his successor is appointed, the absence of the Rector from the meetings of the Court will not cause serious inconvenience, and certainly, in our opinion, not such as to justify the excitement of a fresh election during the session in order to prevent it. As we understand, the Ordinances of the Commissioners under the Universities Act now provide for the election taking place only on the stated day. But it might be desirable to have a statutory declaration that an election at any other time is incompetent.

Assuming that the members of Parliament for the Universities are 'University officers' within the meaning of the clause in the Commission we are now considering, and that we are therefore entitled to express an opinion on the subject, we would recommend that the mode of their election should be assimilated

---

*X. Election of University Officers.*

---

as nearly as possible to that prescribed for the election of Chancellor and of Assessor by the General Council by the Ordinance No. 11 of the Commissioners under the Universities Act. At present the election of a member is conducted according to the system established by the Representation of the People (Scotland) Act, 1868, incorporating with certain amendments the provisions of the Act 24 and 25 Vict. cap. 53, which allowed votes at elections for University members in England and Ireland to be recorded by means of voting papers. Under the system so established, the voting paper of each elector must be signed by him in presence of a Justice of the Peace, and must be delivered to the person recording the votes by some other elector nominated for the purpose by the voter. These requirements, particularly the former, are found to cause inconvenience and expense, which would be much lessened if the principle of the Ordinance were adopted. Under the Ordinance, the voting papers are issued to the members of Council not by the agents of the respective candidates, but by the Registrar, and are returned direct to him through the post by each voter, after the latter has filled up the necessary blanks in the voting paper. The signature of the voter is not required to be attached in presence of a Justice, and, indeed, is not required by the Ordinance to be attested by any one. In this latter respect, perhaps, the provision may seem somewhat lax, and the attestation of a witness might not unreasonably be made necessary. There are also one or two other modifications which seem to us desirable, whether for the election of Parliamentary representatives or of Chancellor and Assessor. These we shall indicate presently.

The clause of the Ordinance provides that, in the event of a poll being demanded, 'the Registrar shall, on the next day but one after the day of meeting, issue through the post to each member resident in the United Kingdom, to his address as appearing in the register, a voting letter in the form of Schedule A hereunto annexed, with all the blanks filled up except the name of the person for whom the member votes, and the signature of the member; and such letter shall be accompanied by a letter of intimation from the Registrar in form of Schedule B hereunto annexed; and each member, upon receipt of his voting letter, if he desires to vote in the election, shall insert the name of the candidate for whom he votes, and affix his subscription, and return the voting letter to the Registrar in such time that the Registrar shall receive the same within twenty-one days after the said day of meeting.' After a provision for the votes being summed up by the Registrar in presence of some one on behalf of each

X. *Election of University Officers.*

candidate, there follows a proviso, 'that it shall be lawful for the Registrar to deliver his voting paper with the blanks duly filled up as aforesaid to any member of the General Council personally, or to send it through the post to any member to a different address from that appearing in the register, on an application by such member to that effect being lodged with the Registrar not later than the day immediately following the day of meeting; but the Registrar shall not in any case deliver the voting letter of any member to another member or to any other person, but shall either send it through the post or deliver it personally to each member; and no vote shall be reckoned in the election which is not returned under the signature of a member to the Registrar in a voting letter issued as aforesaid.'

The Schedule A, referred to in this clause, is in these terms :—

UNIVERSITY OF [*Name of University*].

## VOTING LETTER.

No. [*Number of member as in the register*].

I, [*Name of member in full, with his designation and residence, to be filled in by the Registrar,*] hereby record my vote in favour of\*  
for the office of [*Chancellor or Assessor, as the case may be*].

[*Date*]

+ \_\_\_\_\_

The Schedule B is in these terms :—

UNIVERSITY OF [*Name of University*].

Election to the office of [*Chancellor or Assessor, as the case may be*].

| Persons Nominated. | Proposed by                  | Seconded by                  |
|--------------------|------------------------------|------------------------------|
| A. B., . . .       | [ <i>Name of proposer.</i> ] | [ <i>Name of seconder.</i> ] |
| C. D., . . .       | <i>Do.</i>                   | <i>Do.</i>                   |
| E. F., . . .       | <i>Do.</i>                   | <i>Do.</i>                   |

SIR,—I have to intimate that the above-named persons have been nominated for the office of [*Chancellor or Assessor, as the case may be*], and I have to request that, if you desire to vote in the election, you will insert in the blank of the accompanying voting letter the name of the person for whom you vote, and, after signing the letter, will transmit it to me at the University, so as to reach me on or before [*day on or before which votes must be returned*].—I am, etc.,

[*Date*]

\_\_\_\_\_  
*Registrar.*

\* Here the voter will fill in the name of the candidate for whom he votes.

† Signature of voter.

---

*X. Election of University Officers.*

---

As we have already indicated, it might be a reasonable security for the genuineness of the voting paper as returned, that there should be added to it a clause of attestation in some such terms as 'Signed by the said [Voter] in presence of' a witness, who shall add his signature, designation, and place of residence.

We are further of opinion, and, indeed, it seems obvious, now that the members of the General Council are so numerous, that the provision requiring the voting letters and letters of intimation to be issued through the post on the day next but one after the day of meeting allows too short a time for this purpose. Unless these letters were prepared beforehand, it would be impracticable to have them prepared and issued within the time specified; and before the day of meeting it may be uncertain whether there will be a contest, or, if so, what candidates will be nominated. The provision ought therefore to be altered so as, while directing that as far as possible the letters should be issued through the post simultaneously, to allow a longer time for the purpose, say six or eight clear days. Whether the system be adopted in the case of Parliamentary elections or not, this change should be made by the different University Courts procuring an alteration of the Ordinance for elections of Chancellor and Assessor, otherwise embarrassment may arise.

Again, looking to the increase in the number of members of Council, we think it an inconvenient arrangement to require the Registrar to deliver voting papers to members personally, if application to that effect is made, or even to receive applications after the day of meeting for these letters to be sent to different addresses from those given in the register. No voting letters should be issued except through the post, and any intimations of changes of address should be lodged before the day of meeting. Were the provision abolished that no vote shall be reckoned in the election which is not returned in a voting paper, and were votes allowed to be given by members personally on certain days after the voting papers have been issued, any possible difficulty from members having changed their addresses would be greatly lessened.

We think, also, it would be right that there should be added to the form of the voting letter a declaration, that the member has neither signed any other voting paper nor has voted previously at the election.

The Ordinance, while directing that the votes shall be summed up in the presence of a representative of each candidate, does not contain any provision for the presence of other persons besides the Registrar either at the issuing or the opening of the voting letters,

---

XI. *Emoluments and Retiring Allowances.*


---

the duty of issuing and opening them being left in the hands of that officer alone. Without suggesting that there is any likelihood of the Registrar failing in the performance of those duties, it seems to us that it may be well, for the satisfaction of those interested in the election, to provide that at the issuing and opening of the letters, as well as at the summing up of the votes, representatives of the candidates may be present.

In elections of members of Parliament, the headings of the letters would be slightly different; but, in other respects, we are of opinion that this system, which has in practice been found satisfactory in elections of Chancellor and Assessor, might with advantage be applied to Parliamentary elections. In these, the present requirement of the signature of a Justice causes serious inconvenience and expense, and even in some cases makes it impossible for members to record their votes; for, in remote and thinly populated districts, there may not be a Justice within many miles of where a member resides. The requirement seems unnecessary, and ample security for the genuineness of the voting papers would be furnished by the attestation of a witness, as we propose.

In Parliamentary elections we should not propose to throw on the Universities any expenses connected with the preparation or issuing of the voting letters, or indeed any of the expenses connected with the election. We think these should still, as at present, be borne by the candidates, to whom the change of system would probably cause a considerable diminution of expense.

The members of Council, forming the constituencies of the Scotch Universities, chiefly consist of professional persons who are scattered through all parts of the United Kingdom. In this respect they are more widely separated than the constituencies of the English Universities, and modes of election which have not proved inconvenient to the latter have been found ill adapted to the scattered constituencies of the Scotch Universities. Hence we desire to simplify the method of the Parliamentary election by assimilating it to that of the Chancellor and Assessor.

XI. THE EMOLUMENTS AND RETIRING ALLOWANCES OF  
PRINCIPALS, PROFESSORS, AND LECTURERS.

The eleventh head of our inquiry is, 'The Emoluments and Retiring Allowances of Principals, Professors, and Lecturers.'

In order to put us in possession of accurate information regarding the emoluments of the different Principals, Professors, and Lecturers, we obtained returns of these emoluments from each of

---

XI. *Emoluments and Retiring Allowances.*


---

the Universities applicable to the last six years. These returns, which are given in the Appendix, specify the sources of emolument, whether endowment or class fees, and also what deduction, if any, is made on account of class expenses or assistance.

The returns show that the emoluments of the Professors are in general very moderate, and in many cases much below what is even sufficient for the respectable maintenance of gentlemen in that position. In a few instances, where the classes are numerously attended, the income from fees is such as to make the emoluments considerable, but, even in these cases, not such as can be viewed as large in relation to the incomes of many successful masters of schools. The emoluments, indeed, are not great when the amount of labour involved in carrying on the instruction of such large classes is considered. On the other hand, where, as in most of the classes, the attendance of students is only moderate or, as in some, very small, the incomes are for the most part correspondingly slender. It is true that in the case of certain of the Medical chairs the Professors have additional incomes from practice as physicians or surgeons, and that their position as Professors is not only consistent with, but is an aid to, their practice. Indeed, in certain departments of medicine, teaching can hardly be dissociated from practice, efficient teaching being dependent on practice, while the Professor's practice, on the other hand, is promoted by his teaching. Where this is the case, it is not necessary that the emoluments should be large, the indirect advantage derived from the chair presenting a sufficient attraction to good men, although the mere income may be small. But where the chair is not of a character to enable the holder to supplement his income by practice outside the University, we think that, subject to certain exceptions, the emoluments of a Professor should not be under £600 a year. In the case of St. Andrews, with its present limited attendance of students, there might be a difficulty in applying this rule, and similarly it might be difficult of application to some chairs in the other Universities where the attendance is small. But, subject to such exceptional cases, the incomes ought not to be under the amount we have stated; and as in many instances they fall considerably short of it, the question arises in what way they may be supplemented.

As regards any increase from endowment, in none of the Universities are there available funds for the purpose. The General University Fund, from which alone any increase could come, is even now in each of the Universities insufficient for the claims made upon it for defraying the ordinary current University expenditure, including the wages of officers and servants, the cost

---

XI. *Emoluments and Retiring Allowances.*


---

of lighting, heating, and cleaning the buildings, the expenses of libraries, apparatus, illustration, and assistance, and other charges which must be met, and for which more liberal provision is required than can now be afforded.

To some extent and in certain cases aid may be obtained by increasing the rate of class fee payable by the students. For the most part, the present rate of fee in the different classes is £3, 3s. In the Faculties of Divinity in all the Universities except Glasgow, the fee is under that rate, being either £2, 2s., as in Edinburgh and St. Andrews, or £1, 11s. 6d., as in Aberdeen. Again, the rate of £3, 3s. is exceeded in the Faculties of Law, the fee being in general £4, 4s. for a winter session, or £5, 5s. where a winter and summer session are combined, as in the case of the classes of Civil Law and Scots Law in Edinburgh. In the Faculty of Medicine the fee is at the general rate of £3, 3s. in Glasgow and in Aberdeen, while in Edinburgh it is £4, 4s. In the Faculty of Arts the normal rate of £3, 3s. is exceeded in Glasgow in the class of Natural Philosophy, and in Edinburgh in the classes of Agriculture, Sanskrit, Engineering, and Geology, in each of which classes it is £4, 4s. In the class of English Literature in St. Andrews and in Aberdeen the fee is only £1, 1s.; and this is also stated as the ordinary fee in the classes of Physiology and Natural History in St. Andrews. It may be added that, for a second session's attendance on a class, a reduced rate of fee is in many cases payable.

We think that the time has come when the rate of fees may be revised, and in some cases increased. There is no reason why, in the Faculties of Divinity, the rate should in any of the Universities be under £3, 3s., to which the fee has recently been increased in Glasgow; and accordingly we recommend that in each of the Universities it should be raised to that rate. In the other Faculties the rate of £3, 3s., which, subject to the exceptions we have stated, may be regarded as the normal rate, was fixed in most cases many years ago, no increase having taken place for fully half a century. In Edinburgh and in Glasgow there was an understanding lately arrived at by the University Courts that it ought now to be raised; but any increase was proposed to be made conditional on the institution of entrance examinations, it being considered, as has been stated to us, that the increased rate of fee should be treated as providing compensation for an anticipated loss that might arise to certain Professors from the rejection of students at these examinations. No step to increase the fees was taken, the appointment of the present Commission having intervened. We

---

*XI. Emoluments and Retiring Allowances.*

---

are of opinion that the rate may now properly be raised by each of the University Courts, with such modification in the case of repeated attendance on a class, and with such special exceptions, as the Court may think reasonable. When the increase of fee is made, it may be right that it should be expressly understood—and, if it is thought necessary, declared—that no Professor whose fee is raised shall have any right to claim compensation for loss of income said to be caused or apprehended from measures by way of improvements in the internal arrangements of the University effected, or that may afterwards be effected, by the University Court or otherwise.

Perhaps it may be well to note, as the point seems to have been occasionally overlooked, that the regulation of the class fees rests, under the Act of 1858, with the University Court. Among the powers expressly conferred on the Court by that Act was that ‘to fix and regulate from time to time the fees in the several classes.’

By an increase of the class fee it may be expected that a considerable addition will be made to the incomes of the Professors of Latin, Greek, and Mathematics, which, particularly in Glasgow and in Edinburgh, are very large. A considerable additional income will also be derived by certain of the other Professors whose classes are at present numerous. In the case of chairs with large classes, we are of opinion that any increase of revenue from raising the rate of fee should be applied chiefly to the better remuneration of the class assistants, or the provision of additional assistants. We think that the approval of the University Court should be obtained both as to the number and as to the remuneration of assistants, especially for large classes.

In those cases, however, in which the income is under the minimum standard we have stated of £600 a year, the number of students is in general small, and any increase of income from an increase of the fee will be slight. There is, therefore, no alternative but to look to a considerable extent for the necessary aid to the public funds. It would not, in our opinion, be expedient to give the aid in such a way that the deficiency in the income of any Professor under £600 a year should be made up to that sum by an amount of salary varying according as his fees may rise or fall. It is desirable, if possible, to give every Professor the incentive to exertion which the dependence of a portion of his income on the success of his teaching and the number of his students gives. The proper mode of providing the increase would be to form, in the first place, an estimate of what amount of income each Professor may reasonably be expected to derive from his students; and, after that has been done, to make



---

*XI. Emoluments and Retiring Allowances.*

---

his salary such as, with his estimated income from fees, shall bring up his total emoluments to not less than £600.

As regards the position of the Principals in the different Universities, a different scale of remuneration must be adopted from that which we have stated as applicable to the Professors. As official heads of the Universities they occupy a prominent public position ; and, in the larger Universities in particular, situated as these are in the midst of wealthy communities, the expenses which the holders of the office must necessarily incur are considerable. It must be kept in view also that, except in the case of the Principal of St. Mary's College, St. Andrews, who is also Professor of Divinity, none of these officers has an opportunity of increasing his income by class fees. It may be right and advantageous that the Principal, as far as his time may permit, should deliver occasional courses of lectures on particular subjects suited to his special qualifications, and which may not be sufficiently provided for in the University otherwise. This is done by several of the Principals at present ; but it never has been the usage for the Principal to charge a fee for such lectures, and we think it undesirable that he should. It ought not to be looked on as part of his necessary duty, and he should be left free to superintend University arrangements without the possibility of a suggestion that he may direct them so as to favour his own pecuniary interests. In this view we cannot look with favour on a suggestion which has been made, that the Principal should be one of the Professors. Were he to hold the double office, he would constantly be exposed to the suspicion of acting in a spirit of favour to his special department. He should obviously be removed from the possibility of bias, and in a position to hold an even balance among the different University interests. In his capacity as head of the Senatus, and also in the absence (which usually happens) of the Rector as the ordinary president of the University Court, his time must in general be sufficiently occupied in superintending the administration of University affairs. To perform these duties satisfactorily requires constant care and attention ; so that, even on the mere ground of time, it would be difficult, and in the case of any of the more important classes impossible, for one man to act efficiently in the two offices of Principal and Professor. It is true that at present, in St. Mary's College, St. Andrews, the office of Principal is combined with that of Professor of Divinity ; but the College is a very small one, containing on an average not quite thirty students, and there is another Principal in the University—the Principal of the United College, in which all the teaching in the Faculty of Arts is conducted. The precedent of St. Mary's

---

*XI. Emoluments and Retiring Allowances.*

---

College could not safely be followed in Universities where there is but one Principal, and where the number of students is much larger. Moreover, it is our opinion that the position of St. Andrews should be assimilated to that of the other Universities in regard to there being only one Principal, and that, when such an arrangement can be carried out, the primarius professorship of Divinity in St. Mary's College should be dissociated from the principalship. In the meantime, as long as there are two Principals in the University, and during the subsistence of any arrangement whereby the Principal of the United College may perform the duty of lecturing either on History or on English Literature, we think it reasonable that he should be entitled to receive from his students the usual fees for attendance on a curriculum class of the University.

We have considered with care what amount of remuneration should be provided for the Principals in the different Universities. It is apparent that in the large Universities of Edinburgh and Glasgow the office is a more prominent one, and must be attended with greater expense than in the other two Universities. Again, looking to the relative importance of the two Universities of Aberdeen and St. Andrews, and to the comparative size of the two communities in the midst of which they are situated, it is reasonable that the position of the Principal in Aberdeen should be placed on a more favourable footing than that of the Principal in St. Andrews.

Having regard to these considerations, we are of opinion that in Edinburgh and in Glasgow the emoluments of the Principal should not be less than £1200 a year, in addition to the official house of which each has now the right of occupation. At present the income of each of these officials is £1000 a year, and therefore an increase of £200 a year to each from the public funds is required.

In Aberdeen the present income of the Principal is as nearly as possible £600 a year, and he also has an official house. We think a like addition of £200 a year should be made to his income, making it in all £800 a year.

In St. Andrews, as we have said, we think that provision should be made for only one Principal. The income of the Principal of the United College is at present on an average about £557 a year, and he has no official house. The Principal of St. Mary's College has an income including class fees of about £519, with the right of occupation of an official house; but although we recommend an arrangement whereby, when an opportunity occurs, his duties should be confined to those of the professorship of Divinity, it would obviously be impossible to recommend that, with so slender an income, his official residence should be taken from him. In

---

XI. *Emoluments and Retiring Allowances.*

---

this way, as we think that the Principal of the University ought to have an official residence, we recommend that the Principalship of the United College, which we contemplate should eventually be constituted the Principalship of the University, should be provided with a house, and that the salary of the office should be £700 a year. We also recommend that in the meantime the emoluments of the senior Principal should be made up to that sum. In order to effect these arrangements, it may be desirable to unite the University and the two Colleges into one corporation, and to have only one corporate fund under the management of one administrative body, the present *Senatus Academicus* of the University. This might be effected without any serious interference with the existing appropriation of the funds of the different corporations.

With regard to the provision of an official residence for the Principal of the United College, we believe that it has already been in contemplation on the part of the Government to place him in this respect in a similar position with all the other Principals of the Scotch Universities. This arrangement will be necessary in the ultimate result, and we do not think it should be delayed until the office becomes that of Principal of the University.

It has been represented to us by various witnesses, that the present scale and conditions of retiring allowances are inadequate. These were established by Ordinance of the Commissioners under the Universities Act, after a correspondence with the Treasury, extending over the years 1860 to 1862, which is set forth in the Appendix to the Report of that Commission. The conditions originally proposed by the Commissioners were more favourable to the Professors than those which were adopted in the Ordinance; but they were regarded by the Treasury as open to objection in certain respects, and ultimately the existing scale and conditions were sanctioned. These are embodied in the 26th Ordinance of the Commissioners, and are generally such that any Professor retiring from office on the ground of age or infirmity, after a service of ten years, is entitled to an annual allowance equal to twenty-sixtieths of the annual emoluments of his office, and to an increase of a sixtieth for every additional year's service until the allowance reaches forty-sixtieths, or two-thirds of the emoluments, after which the allowance does not increase, although the service may extend beyond the thirty years entitling to the maximum allowance. A Professor disabled by ill-health or infirmity, but who has not completed ten years' service, has no claim to a retiring allowance; but the consideration of any such special case, as well as

---

*XI. Emoluments and Retiring Allowances.*

---

of the propriety of granting an increased rate in other cases, rests in the discretion of the Treasury.

These conditions are in effect framed on the principles of the Superannuation Act, 1859, 22 Vict. cap. 26, relative to persons who have held civil offices in the public service. By the 2d section of that Act, the rate of superannuation allowance in the ordinary civil service is fixed at ten-sixtieths of the annual emoluments after ten years' service, and increases by a sixtieth for each additional year's service until forty-sixtieths are reached at the end of forty years, when there is no further increase. To provide, however, for the case of persons holding professional and other special offices requiring qualifications not ordinarily to be acquired in the public service, and who receive their appointments in general at an age exceeding that at which public service ordinarily begins, the 4th section empowers the Commissioners of the Treasury by warrant to direct that, when the holder of any such office shall retire, 'a number of years, not exceeding twenty, to be specified in the said order or warrant, in computing the amount of superannuation allowance which may be granted to him under the foregoing section of this Act, be added to the number of years during which he may have actually served; and also to direct that, in respect of such offices or class of offices, the period of service required to entitle the holders to superannuation may be a period less than ten years, to be specified in the order or warrant.' By the 10th section it is declared not to be lawful to grant any superannuation allowance under the Act to any person 'who shall be under sixty years, unless upon medical certificate to the satisfaction of the Commissioners of the Treasury that he is incapable from infirmity of mind or body to discharge the duties of his situation, and that such infirmity is likely to be permanent.'

We have thought it right to quote this last provision, as having a material bearing on the grounds on which a retiring allowance should be granted to a Professor who is above sixty years of age.

It will be observed, that the rule adopted in the 26th Ordinance under sanction of the Treasury as applicable to Professors is in effect that of the first provision contained in the 4th section of the Act, ten years having been added to the actual period of service for the purpose of computing the amount of retiring allowance. The Act authorizes a number of years 'not exceeding twenty' to be added; and, in the case of Professors, we are of opinion that the addition of ten only does not in the majority of cases provide a sufficient allowance. It appears from the correspondence between the Treasury and the Commissioners to which we have referred,

---

*XI. Emoluments and Retiring Allowances.*

---

that the Treasury had at their request been furnished by the Commissioners with a return showing the ages at appointment of the different Principals and Professors in the four Universities. These returns showed the average age of appointment of Professors to be between thirty-eight and thirty-nine, so that the addition of ten years to the actual service makes the appointment date back to an age between twenty-eight and twenty-nine. We think that, if the addition allowed were of fifteen instead of ten years, it would, by enabling the appointment to date from an age between twenty-three and twenty-four, bring the rate of allowance more into accordance with that which operates in the case of persons employed in the ordinary civil service of the State. It would still be in compliance with the conditions of the 4th section of the Superannuation Act, as within the maximum addition of twenty years to the actual service which that section authorizes; and it would, we think, remove much of the sense of hardship which is thought to attend the application of the present rule. We recommend, therefore, that this improvement in the rate of allowance should be made.

We have quoted the words of the 10th section of the Superannuation Act, making it unlawful to grant a superannuation allowance to any person 'under sixty years of age,' unless upon medical certificate of incapacity from infirmity of mind or body. This condition being made applicable to persons under sixty years of age, is clearly not applicable to persons who are above that age, on the ground, no doubt, that after sixty a man may be presumed to be in some degree incapacitated by age for the performance of his official duties. By the 9th Ordinance of the Commissioners under the Universities Act, prescribing the course to be followed by a Principal or Professor desiring to retire on the ground of age or infirmity, the University Court, to which he must make application by petition, is, on being satisfied that the applicant is, 'by reason of age or infirmity, permanently incapable to discharge the duties of his office,' to report to Your Majesty in Council that in their opinion he should be permitted to retire; and on their opinion receiving the approval of Your Majesty in Council, he is to be entitled to retire on a retiring allowance. The terms of the Ordinance, it will be observed, leave it open to the Court to treat age in itself as a ground of incapacity, just as under the Superannuation Act any one above sixty is entitled to retire on an allowance without a medical certificate of incapacity. In practice, however, we have been informed that in some of the Universities a medical certificate of permanent incapacity has been required from all persons, whatever may be their

---

*XI. Emoluments and Retiring Allowances.*

---

age. This requirement has been found to stand in the way of persons retiring even at a very advanced time of life. A man who is very old may yet be in full possession of his faculties; and although he may feel it would be better that he should retire, and it may be for the interest of the University that the chair should be filled by a younger man of greater vigour, he is both himself reluctant to apply for, and a physician may hesitate to sign, a certificate that he is incapable to discharge the duties of his office. The incapacity arising from age is generally a matter of degree, and it seems a wise provision of the Superannuation Act that, when a man attains a certain age, the degree of incapacity should not be a subject for inquiry, but that the fact of incapacity should be presumed. For performing the duties of most professorships, we think it would be rare that a man of sixty would be incapacitated by age, and we are therefore disposed to recommend the adoption of a somewhat higher age beyond which a medical certificate should not be necessary. If an additional period of five years besides the ten now added to the actual period of service were sanctioned as we have recommended, we think it would not be unreasonable that an addition of five years to the age at which, under the Superannuation Act, incapacity is presumed should also be made. In this way we would recommend that up to the age of sixty-five a medical certificate of incapacity should be required, but that after sixty-five a Professor should be entitled to retire on the scale of allowance corresponding to his period of service.

There is one slight modification of the rule of computation by years of service which has been suggested to us as desirable, and which, although not affecting the rate of allowance to any material extent, is yet of some practical importance in the interest of the Universities. It happens not infrequently, that an appointment to a professorship has been made shortly before the commencement of the winter session, and the rule of calculation by years of service induces a Professor to delay an application for retirement which he is contemplating to that period of the year, so as to complete another full year of office. By the time the application is carried through the necessary forms of a report by the University Court and approval by Your Majesty in Council, the next winter session of the University has either commenced or is so closely imminent that sufficient time is not given for the appointment of a new Professor, and for his making due preparation to enable him to carry on the work of the class. The class, therefore, if not suspended for the winter, is at all events conducted by the new Professor at great disadvantage. The suggestion accordingly is,

---

XII. *Bursaries, Scholarships, and Fellowships,*


---

that in the case of Professors the computation should be not by years, but by complete sessions of service. By this arrangement a Professor would be enabled to present his application for retirement immediately after the conclusion of a session, without incurring the loss of a year's service in respect of the full year, as reckoned from the day of his appointment, not having been completed. All the year's work required from him would have been given, so that the University would lose nothing by his retirement being a few months earlier than by the present rule, while it would be benefited by greater time being afforded to his successor to prepare for the following session. We think it desirable that effect should be given to this suggestion.

Several of the present Professors in the Scotch Universities have previously held chairs in the Queen's Colleges in Ireland, where we understand there exists a system of superannuation allowances to Professors from the public funds. It has been represented to us as desirable and fair, that persons in that position should be allowed to reckon their years of service in the Queen's Colleges along with their service in the Universities of Scotland in estimating their rate of retiring allowance. Seeing that the nature of the service in the two cases is the same, we think that this is a claim which should properly be allowed.

In connection with the subject of the retirement of Professors, there is a want of a fixed and authoritative procedure for the resignation of a chair in cases where no retiring allowance is applied for. We think it would be desirable that intimation of an intended resignation should, in the first place, be made to the Senatus as the executive body of the University, and be transmitted by that body to the University Court with any observations which may be required in the interests of the University as to the time for receiving the resignation, and for appointing a successor to the vacant chair. The University Court, if it accepted the resignation, should then intimate the vacancy to the patron of the chair, with such observations as it deemed proper.

## XII. THE MODE OF APPOINTMENT TO BURSARIES, SCHOLARSHIPS, FELLOWSHIPS, AND OTHER SIMILAR FOUNDATIONS, AND THE CONDITIONS OF THEIR TENURE.

We have considered with attention the subject embraced under the twelfth head of our inquiry, viz. 'The mode of appointment to Bursaries, Scholarships, Fellowships, and other similar Founda-

---

*XII. Bursaries, Scholarships, and Fellowships.*

---

'tions, and the conditions of their tenure.' The value for educational purposes of a well-organized system of bursaries and scholarships, given on examination, is now well recognised, and we have received from various witnesses evidence bearing on the conditions under which such foundations may most advantageously be established, and showing the beneficial results which may be expected from them. By a 'bursary' is meant, in general, a pecuniary aid given to a student to enable him to prosecute his course at the University. The terms 'scholarships' and 'fellowships' are used to denote pecuniary rewards given to students after they have completed their course, or a portion of it, for distinction shown in their University studies.

Bursaries may be bestowed in any of the Faculties, but at present the great majority of the bursaries in the different Universities are attached to the Faculty of Arts. In the Faculties of Divinity also the proportion of bursaries to the number of students is in general large. In the Faculties of Law and Medicine there are at present very few bursaries.

There are two great classes of bursaries—competition bursaries, and presentation bursaries; the former being given according to the result of a competition among candidates, and the latter bestowed by the patrons to whom the right of presentation belongs, either as matter of favour, or according to their opinion of the claims of different applicants.

It would be impossible in our opinion to over-estimate the value of competition bursaries in the Faculty of Arts, as an incentive to the schools to send up their pupils to the University in an advanced state of preparation, and as an effectual means of securing a high standard of attainment among the students entering the University. The University of Aberdeen affords a conspicuous instance of the success of the system. In that University, the returns that have been furnished to us show that, in addition to 137 presentation bursaries, there are as many as 155 bursaries open to competition in the Faculty of Arts, while the number of Arts students for the last sixteen years has averaged 337. A few of these bursaries are as low in value as £6 or £7, but the majority vary from about £10 to £35 a year. They are generally tenable for four years, or the period over which the Arts course usually extends, and about forty are awarded by competition each year to the students, about 100 in number, entering the University for the first time. A much larger number of candidates, however, come up for the competition, the number who come forward being stated by the late Principal Campbell at from 250 to 300. While some of



---

XII. *Bursaries, Scholarships, and Fellowships.*

---

the unsuccessful competitors may obtain presentation bursaries, or may have sufficient means to attend the University without a bursary, the majority return to school, and either abandon the idea of entering the University or prepare for the competition in another year. The effect of the system on the standard of attainment of those entering the University is very marked. Principal Campbell, who was for some years Professor of Greek in King's College, Aberdeen, before the two colleges were united, and who had himself been a student in the University of Glasgow, and also in Edinburgh, stated to us that the Aberdeen system has had the effect of securing a higher standard of teaching, as well as of results, than in the other Universities. 'A Professor,' he said, 'who has to teach Latin or Greek in the University of Aberdeen, is much surer of his ground with the young men than a Professor elsewhere. I was surprised at the work that I could get out of some of these boys; and I found it was all produced by this, that they had been accustomed to work with the bursary competition in view.'

We believe that, to some extent, the high standard shown by the students entering the University of Aberdeen is attributable to the fact that that University draws its students mainly from the district in which the judicious application of the funds under the Dick and Milne bequests has succeeded in elevating the character of the teaching given in the parochial schools beyond that which generally exists in other parts of Scotland. But, independently of this advantage in the character of their early training, there cannot be a doubt that the prominence assigned to the annual bursary competition at the University has operated powerfully in raising the standard of attainment among the students. Not merely to the boys themselves when at school, but to the schoolmasters, the bursary competition presents an object towards which their energies are constantly directed, and the influence on the education both at the schools and at the University is most beneficial.

The advantages of the bursary competition are now so generally acknowledged, that for some years in the other Universities also a similar system has been established: An open bursary competition is held annually at the beginning of the session, and the number of students who come forward for it is rapidly increasing. It is true that in Edinburgh and in Glasgow the open bursaries are not yet so numerous as to make the effect of the competition so generally felt as it is at Aberdeen; but these Universities are now receiving, year by year, endowments for foundations

---

*XII. Bursaries, Scholarships, and Fellowships.*

---

of this kind, and it may be hoped that in time those beneficial results will follow which are so conspicuous in Aberdeen.

Considering that much benefit may be looked for from an increase in the number of competition bursaries at the larger Universities, we cannot feel surprise at a suggestion which has been made to us by some witnesses,—viz., that the bursaries which we have described as ‘presentation bursaries,’ and for which there are some valuable foundations both at Glasgow and at Edinburgh, should be thrown open to competition, and not bestowed by the mere will of the patrons as at present. As far as the conditions of the foundations under the control of the *Senatus Academicus* permit, we believe that in each of the Universities that body properly confers them as rewards of merit, and in most instances according to the result of the annual competition. In some cases also, the patrons of bursaries, although not bound to do so, voluntarily place their bursaries among those to be bestowed in that way. This course has long been adopted by the Town Council of Aberdeen, who have a considerable number of bursaries in their gift, and their example may with propriety and with advantage be followed by similar bodies at the other University seats. It cannot, however, be said that as yet the applications which have been made to private patrons to allow their bursaries to be competed for have been attended with success; and, indeed, the evidence shows that very frequently the persons on whom such presentation bursaries have been bestowed have either been undeserving of them or have failed to turn them to fair advantage. Professor Ramsay, of Glasgow, has placed before us a careful analysis of the performances of different classes of bursars at that University from 1860 to 1870, arranged under the three heads of those appointed, (1) by the Senate; (2) by the Duke of Hamilton, who has the patronage of certain valuable foundations; and, (3) by the Town Council of Glasgow and other public bodies. From this analysis it appears that, of class prizes during the ten years, the competition bursars had on an average gained  $6\frac{1}{2}$  apiece; the Exchequer bursars (who are appointed by the Senate without special examination),  $5\frac{1}{2}$ ; the Duke of Hamilton’s bursars, about 1 apiece; and the bursars appointed by public bodies, only about  $\frac{1}{2}$  of a prize apiece. The analysis also shows the different kinds of certificates obtained by these classes of bursars respectively, and the result shows, as stated in Professor Ramsay’s evidence (Q. 7761), ‘(1) the conspicuous excellence of the competition bursars, and of those appointed by the Senate without examination; (2) that the great bulk of the

XII. *Bursaries, Scholarships, and Fellowships.*

‘ bursars appointed by individual patrons, or by public bodies, are distinctly *below* the average in point of merit, they not having obtained on the average one good certificate apiece during the whole of their University course; (3) that the bursars appointed by the Senate, with or without examination, have been the best students in the University; (4) that the worst of all are the bursars appointed by the public bodies.’

These and other facts of similar bearing were brought before the Commissioners who reported on the Endowed Schools in Scotland in the year 1875, and the conclusions at which those Commissioners arrived, after reviewing the evidence before them, were, (1) that bursaries in the patronage of public bodies should be thrown open to public competition; (2) that bursaries in the gift of private individuals under £10 in value should be combined so as to form bursaries or scholarships of higher value, and that these should be thrown open to competition; (3) that for all other bursaries in private hands, or locally restricted, the University should be empowered to prescribe a standard of qualification, and, in the event of no qualified candidate presenting himself, the bursary should be for that term thrown open to competition.’

In these conclusions we concur with some qualification. It has been represented to us that they do not go far enough, and that the evidence establishes the expediency of the total abolition of all private rights in the patronage to public University endowments. Even, however, were we of opinion that the abolition of private patronage would be desirable, we cannot regard it as practicable. Endowments are given or bequeathed now, as formerly, for the foundation of University bursaries subject to certain restrictions, or to be placed in the gift of private trustees or other persons. We are far from desiring to discourage such foundations, but, if uncontrolled by any condition as to the character or attainments of the persons on whom they are to be bestowed, they may indeed be of little use, or perhaps hurtful. If, however, it is provided, as we think it ought to be, that no one shall be allowed to hold a bursary in the University for more than one year who fails to pass creditably the ‘First Examination’ required of all students proceeding to a degree, and that, in the event of a presentee to a bursary being unable to pass that examination, the bursary shall for the remaining years of its endurance be included among the bursaries open for competition, a check on the admission of bursars of inferior qualifications will be afforded, and it may be expected that private patrons in presenting to bursaries will

---

*XII. Bursaries, Scholarships, and Fellowships.*

---

be induced to use greater care than in some cases they have been in the habit of doing.

We recommend, accordingly, that all bursaries in Arts not open to competition shall be made subject to a general condition that the persons presented shall pass the 'First Examination' for a degree within a year after entering the University, subject, in the event of failure, to the forfeiture of the bursar's right, and to the bursary for the remaining period being included in the list of competition bursaries for that occasion.

Thus, if a bursar be presented for a term of years and shall pass the 'First Examination' within a year, he would enjoy his bursary for its full term; but if he fail to pass the 'First Examination' within the year, he would forfeit his bursary, which would be thrown open to competition for the remainder of the term. After that had expired, the patron would have his right of a new presentation, in the same manner as if his presentee had proceeded without interruption through his full curriculum.

We desire to guard ourselves against being supposed to disapprove of presentation bursaries. Far from holding the opinion that all educational aids should be thrown open to competition, we think that presentation bursaries, when properly applied, and under due restrictions, may serve a beneficial end. It is the declared object of many of these foundations to assist poor and deserving persons in studying at the University. This object we regard as important in itself; and we think it is substantially attained, and that the main design of the founders is promoted, if the endowments are conferred on deserving students, whose means are too narrow to admit of their prosecuting a University course without them, although it may be that, possibly from early difficulties, their deserts in the way of attainment are not of the highest order. We should therefore disapprove of any step that would exclude such persons from the possibility of the assistance which presentation bursaries afford. It is true that bursaries have frequently been bestowed by patrons with too little care or discrimination. But this is by no means always the case; and with the restrictions proposed by us as to passing the 'First Examination' within a reasonable period, we think that presentation bursaries may be of great value in the educational system of the Universities.

There is one class of bursaries which are in an intermediate position between open competition bursaries and presentation bursaries—viz., bursaries restricted to students from certain localities. Such bursaries are now frequently founded by county associations, and it has become usual to include them in the general com-

---

XII. *Bursaries, Scholarships, and Fellowships.*

---

petition, subject to the condition that the competition is open only to young men from the particular locality. Although not of such wide utility as perfectly open bursaries, they are yet valuable as encouraging education in the districts to which they are limited. If, indeed, it should happen in any year that no student appeared from the locality of sufficient merit to pass the 'First Examination' within a year, the bursary should, we think, for the remainder of the term, just as in the case of private bursaries, be open to general competition.

When the funds are not (as frequently happens) in the hands of the University, the University has no official means of knowing when the bursaries are vacant or dormant; and even when it is known that they are dormant, difficulty may be experienced in securing that they are filled up. In some cases we have been told that private patrons, when applied to by the University for information, have either sent no answer, or have replied that the University had nothing to do with the matter.

The details of any scheme involving interference with the patronage of bursaries, or with the conditions of bursary foundations in any respect, must probably be entrusted to some body, such as the General Universities Court, specially empowered by statute to deal with the subject. The Ordinances of the Commissioners under the Universities Act effected many important changes in foundations of this kind; but cases have been brought before us of bursaries with which, perhaps from the foundations being of too recent a date, they did not deal, but which are now left useless, from such causes as smallness of value, or the nature of the conditions attached to the foundations. Our attention was specially called to this subject by the *Senatus Academicus* of Aberdeen, where several bursary foundations are now unavailable from causes of this kind.

The existing University authorities, it must be kept in view, have no power of themselves to make any alteration, however desirable, in the conditions attached to bursary foundations by the founders. It would appear, indeed, that in some instances a power of this kind has been assumed, the foundation bursaries, for example, in St. Mary's College, St. Andrews, having, on strong grounds of expediency, been reduced in number, and the value of each proportionally increased by the College, with the consent of the University Court; and again, in the case of the valuable Redhyth bursaries in the University of Aberdeen, new arrangements, not sanctioned by the deed of foundation, having been made by the *Senatus Academicus* and other trustees, in concert

---

XII. *Bursaries, Scholarships, and Fellowships.*

---

with the patron, the Earl of Seafield. Any such changes, however, are beyond the power of the College or University; and neither the consent of the University Court, nor the concurrence of the patron, can operate to make them valid.

In the event of power being given to any body to deal with the conditions of bursary foundations, it would be well that the case of bursaries attached to schools, but tenable at a University, should be embraced within their functions. The Redhyth bursaries in Aberdeen, to which we have just referred, are in this position.

A subordinate question in regard to the appointment to competition bursaries has been raised—viz., as to what is meant by a student's 'first or second session of attendance in the Faculty of 'Arts' within the meaning of various bursary Ordinances, which provide that the competition shall be open to students entering on their first or second session. It is represented that if a student, when he comes to the University, passes the present preliminary examination, so as to be enabled to complete his course in three years, he is then in effect entering on his second year, and that he ought not to be allowed to compete in the following year, when, although he has actually been in attendance for one year only, he is virtually, it is said, entering on his third session as far as University standing is concerned. It is said, in short, to be unfair that students who are practically in their third year should compete with those who are in their first. There is much force in this objection; but we think it would be obviated by the arrangement we are now to suggest. We propose that the general bursary examination should be combined and made identical with the 'First Examination,' the passing of which we have recommended should be required of all students proceeding to a degree. In that case, every student would have one chance, and one chance only, in the general bursary competition, viz. on the occasion of his passing the 'First Examination.' It has been suggested that a student who fails to pass the 'First Examination' in one year and passes in the next will have two chances in the bursary competition. But this seems to us to be a mistake. One who does not pass the 'First Examination' cannot with any propriety be said to be in the number of those whom the examiners are to classify as either successful or unsuccessful in the bursary competition. This arrangement might, it appears to us, have a salutary effect in inducing schools to send their pupils to the University in as advanced a state of preparation as possible.

We have suggested that the bursary examination should be combined with the 'First Examination,' and to a certain extent be

---

XII. *Bursaries, Scholarships, and Fellowships.*

---

identical with it. In carrying out this suggestion, we should propose to adhere pretty closely to the precedent set by the University of Aberdeen in the bursary competition, which has proved of so much service in that University. In this examination there are two classes of subjects—the one compulsory, the other optional. The compulsory subjects are: Translation of Latin and Greek prose, with grammatical questions; English grammar; Arithmetic as far as fractions and proportion; and the first book of Euclid. The total number of marks obtainable in this division of the examination is 600.

In addition to these, the candidate must take some one of the following optional subjects:—A. Translation of English prose into Latin (the so-called version); B. Algebra and Geometry; or any two of the following: (a) Higher Latin; (b) Higher Greek; (c) English composition; (d) French; (e) German; (f) Chemistry; (g) Zoology. The total number of marks obtainable in these optional subjects is 400.

It will be observed that the examination in the compulsory subjects closely agrees with that which we have recommended for the 'First Examination,' and the latter might be made an essential part of the bursary examination.

But it is reasonable to require from a bursar something more than is demanded for simple admission to the senior classes, and this requirement is met by the examination in the optional subjects, which has the further advantage of enabling the candidate to obtain credit for acquirements in departments of knowledge other than those embraced by the compulsory examination, and of giving importance to the modern languages, and to physical and natural science.

While fully approving of the principle of the Aberdeen scheme, however, it appears to us that it is susceptible of improvement in detail.

The number of marks (400) attached to the 'version' is altogether out of proportion to its value as compared with the number (200) allotted to higher Latin, higher Greek, and to the translation of English into a modern language; Physical Geography and Natural Philosophy are entirely omitted from the list of scientific subjects; and Zoology, of which it is very difficult to give any real knowledge in schools, is received in place of Elementary Physiology, which may very readily be taught well, and a knowledge of which is an indispensable preliminary to Zoology, while it is useful to every one and of special value to the intending medical student. We have recommended that the Arts student who has passed his

---

XII. *Bursaries, Scholarships, and Fellowships.*


---

'First Examination,' and desires to proceed to a degree in Arts, should be permitted, in place of going through the existing curriculum, to select any one of five departments of study; and we are of opinion that the distribution of the optional subjects, and the value to be assigned to them, should have reference to the specialization of the student's career thus permitted (omitting the department of Philosophy as unfitted for youthful students), in some such manner as the following:—

*Optional Subjects.*

|  |     |
|--|-----|
| I. Division of Literature and Philology.                     |     |
| Higher Latin with Version, . . . . .                         | 400 |
| Higher Greek, . . . . .                                      | 400 |
| English Composition, . . . . .                               | 200 |
| French, . . . . .  | 200 |
| German, . . . . .  | 200 |
| II. Division of History and Political Geography.             |     |
| Greece, . . . . .  | 200 |
| Rome, . . . . .  | 200 |
| Britain, . . . . .   | 200 |
| III. Division of Mathematical Science.                       |     |
| Algebra, . . . . .   | 200 |
| Geometry, . . . . .  | 200 |
| IV. Division of Natural Science.                             |     |
| Natural Philosophy, . . . . .                                | 200 |
| Chemistry, . . . . .   | 200 |
| Animal Physiology, . . . . .                                 | 200 |
| Botany, . . . . .  | 200 |
| Physical Geography (including Elementary Geology), . . . . . | 200 |

The candidate should be permitted to select from this list subjects to the value of 400 marks; in other words, either of the first two, or any two of the others.

It is of great importance, in carrying out this scheme, that the examinations in natural science should be made to some extent practical, so as to prevent the preparation for it from consisting in a mere getting up of text-books.

Although students after passing the 'First Examination' would not be entitled to join in the general bursary competition, it would of course still be competent, and also desirable, to have bursaries or scholarships awarded at a later stage of a student's course for distinction shown while at the University.

The observations we have made relate mainly to the mode of appointment to, and conditions of, tenure of bursaries in the Faculty of Arts. In the more advanced Faculties, the foundations for pecuniary aid to students in prosecuting their course at the University receive sometimes the name of bursaries and sometimes that



---

*XII. Bursaries, Scholarships, and Fellowships.*

---

of scholarships. Some of the bursaries are presentation bursaries in the gift of private patrons; but the scholarships, being in all cases, we believe, in the gift of the University, are awarded according to merit, either on special examination or as shown by a student's distinction in his previous course. Thus, while the Fullerton, Moir, and Gray scholarships in Aberdeen, instituted by the 47th Ordinance of the Commissioners under the Universities Act, are awarded after a special competitive examination, the Murray scholarship in the same University, as regulated by the 74th Ordinance of the Commissioners, is conferred on the graduate in Arts who, 'after such examination or inquiry as they shall think 'fit,' shall appear to the Senatus Academicus to be most deserving. It seems unnecessary to insist on the propriety of making merit the test of appointment to scholarships which are bestowed at an advanced stage of a student's University course. Any argument in favour of presentation bursaries in the Faculty of Arts, that they may afford assistance to deserving young men whose school education has been defective, is inapplicable to the case of pecuniary rewards given after a student has been for some years at the University. Indeed, in the higher Faculties, it may be questioned whether presentation bursaries are of any utility, and whether it would not be desirable that all foundations of this kind should, as far as practicable, be thrown open to competition.

In most cases, the scholarships or fellowships which have been instituted in the Universities are free of any condition either as to future study or as to taking part in University work. To some, however, the condition of pursuing a course of study to the satisfaction of the Senatus Academicus is attached, while in the case of a few the holders are required to aid in the teaching work of the University. Thus, the William Euing fellowships in the University of Glasgow, founded in 1874 under the will of the late Mr. William Euing, and which are competed for by graduates in Arts, are subject to the condition that the fellows shall reside in Glasgow for at least nine months of the year, and shall 'open private classes 'of limited numbers for giving instruction to and aiding students 'of the University (more especially during the vacation, or such 'part thereof as may be found expedient) in such studies as may 'be auxiliary to or illustrative of the courses of lectures which such 'students may have attended, or be desirous of attending, and also 'to carry out the same purposes by a systematic course of private 'tuition.' The fellowships are three in number, and are each of the value of £80 per annum.

So also in the University of Edinburgh, the holders of the Rhind

---

*XII. Bursaries, Scholarships, and Fellowships.*

---

Scholarships, which are two in number, each of the annual value of £90, 'may be required to undertake duties connected with the 'teaching of the University, or otherwise assist in some department 'of its operations.'

There can be no doubt that, particularly in the larger Universities, foundations of this nature may be of value in providing the means of tutorial aid to students during the summer. To the holder of a scholarship or fellowship the most valuable form of endowment is one which is unfettered by conditions of tenure, and which leaves him free to prosecute his studies, at the University or elsewhere, in the way he may consider most advantageous or most suitable to his future career in life; but, seeing that there are not as yet many foundations in the Universities for scholarships or fellowships, and that the want of teaching power, more particularly in the form of tutorial instruction, is much felt in some departments, it seems desirable that some provision should be made in this way for its being given.

It is probably from considerations of this kind that the Senatus Academicus have attached to the very valuable George A. Clark bursaries in the University of Glasgow, conditions which in some respects cannot be regarded as warranted by the terms of the foundation. These bursaries are four in number, and were founded under the will of the late Mr. George A. Clark of Paisley, who bequeathed in 1872 a sum of £20,000 to the University for the creation of four bursaries, tenable each for four years. No other conditions or directions as to the tenure of the bursaries were, we understand, specified in the will. Each of the bursaries being thus of the value of not less than £200 a year, it is perhaps not surprising that the Senatus hesitated to follow the simple directions of the testator, and to leave the bursaries to be treated as ordinary bursaries tenable by students in one or other of the Faculties of the University. Accordingly, the course adopted has been to direct that in each case the holder, who must have either graduated in Arts with honours or have presented himself for the final examination for the M.A. degree with honours, 'shall undertake, during his 'tenure of the bursary, to follow such a course of study in the 'University, or to give such assistance in the teaching work of 'the University, as the Senate may determine.' It has been stated to us (see evidence of Dr. Fergus, Qq. 7574-7577), that the employment of the bursars in tutorial work has been considered a grievance. There seems to be little doubt that it is beyond the power of the Senatus to require the bursars to take part in University teaching, although it may well be believed that that body has

---

XIII. *Finance.*

---

felt embarrassment as to how best to apply so valuable a foundation consistently with the terms of the bequest.

Still the *Senatus* ought not in such circumstances to assume a power of prescribing conditions unwarranted by the deed of foundation. It is the duty of that body, where the conditions of a bequest have been left indefinite, and where difficulty is felt as to the employment of the funds, to obtain the authority of the Court of Session for a scheme under which the endowment may be applied.

It should not be forgotten that the most important use of such scholarships or fellowships as are tenable by graduates is to provide men of special literary or scientific capacity with the means of developing that capacity, and thus to encourage learning and aid original investigation. A scholarship burdened with tutorial duties cannot be said to subserve this function; and such influence as the University authorities may feel empowered to exercise upon the holders of scholarships should rather be directed to obtaining from them guarantees that the privileges they enjoy are turned to good account in the directions we have indicated.

We believe that the interests of learning and of science in Scotland would be greatly promoted by increasing the number of scholarships tenable by graduates. The great difficulty in the way of a student who has the ability and the will to devote himself to literary work or scientific research, is the want of the means of maintaining himself during the time which must elapse between the termination of his University life and his establishment in a definite position in the world of letters or of science, and scholarships provide the only obvious means of meeting this difficulty. But while the liberality of private benefactors is largely augmenting the bursary fund,—to which in Aberdeen alone £30,000, and in Edinburgh and Glasgow even larger sums have been added during the last fourteen years,—and full, if not superabundant, provision is thus made for students, the scholarships open to graduates remain comparatively few.

Professor Bain has suggested that, in the case of Aberdeen, a portion of the large bursary fund should be devoted to the institution of scholarships in natural and mental science; and we consider the proposal to be worthy of serious attention.

### XIII. THE FINANCIAL POSITION OF THE UNIVERSITIES, AND THE ADMINISTRATION OF THEIR PROPERTY AND REVENUES.

The financial position of the Universities occupied much of the attention of the Commissioners under the Act of 1858, and the

---

XIII. *Finance—St. Andrews.*

---

administration of their property and revenues has in a great measure been carefully regulated by the Ordinances of those Commissioners. We have obtained from each of the Universities full returns, which are printed in the Appendix to our Report, and from which their present financial position may be understood. It seems right, however, to notice one or two points in regard to each of them, as indicating how far their actual position accords with the estimates made by the Commissioners under the Act of 1858, and in what respects it may be desirable that changes should be introduced.

*University of St. Andrews.*

In the University of St. Andrews there are at present, as at the time when the Commissioners under the Act of 1858 presented their Report, three corporations, viz., the United College of St. Salvator and St. Leonard, St. Mary's College, and the University itself.

The returns show that the income derived from the property belonging to the United College fairly accords with the estimate given in the Ordinance No. 21 of the Commissioners of 1858, for regulating the financial arrangements of the University and Colleges of St. Andrews. That Ordinance modified in various respects the arrangements which previously existed for the distribution of the College revenue among the Professors. The property of the College consists in a large proportion of land leased in farms; and it was found by those Commissioners that a considerable debt, amounting to about £10,000, had been charged upon the land for expenditure on supposed permanent improvements, but that no sufficient provision for the redemption of this debt had been made. The practice which existed of dividing the whole free revenue among the members of the College seemed hardly to be justified by the Act, 20 Geo. II. cap. 32, under which the College was constituted, and was attended with obvious risk. The Ordinance, therefore, after providing for certain necessary charges on the College income, directed, with a view to the redemption of the debt, that a sum, sufficient to extinguish it in not less than thirty years, should be annually set apart as a terminable rent-charge for that purpose. Further, while authorizing, under certain conditions, the distribution of the College revenue among the Principal and Professors, it provided that before any such distribution should be made, a sum equal to five per cent. on the net residue of the income should be applied towards a Reserve Fund, intended as a source for meeting payments on account of ex-

---

XIII. *Finance—St. Andrews.*

---

traordinary expenditure on the College property. To secure, as far as possible, that no sums should be paid from this fund except for such extraordinary expenditure, the consent of the University Court to any payment being made from it was required.

The returns furnished on the part of the College show that these provisions of the Ordinance have been carefully observed, and it may be expected that they will have a permanent salutary effect on its financial position. A terminable annuity, amounting to £613, 18s. 4d., is paid to the Scottish Widows' Fund Assurance Society; and by means of this payment the debt of £10,000 on the College property will be extinguished at Martinmas 1892. At that period, accordingly, the available income of the College will, through the dropping of the annuity, be increased in effect by £613, 18s. 4d., allowing, after a proportional additional payment towards the Reserve Fund, an increased income of about £70 to the office of Principal, and of about £60 to each of the eight professorships in the College, to which a certain share in the surplus revenue is attached. These are, the professorships of Humanity, Greek, Mathematics, Logic, Moral Philosophy, Natural Philosophy, Civil and Natural History, and Medicine.

The professorship of Chemistry, although constituted a professorship in the United College by the Ordinance No. 21, has no share in the ordinary College revenues, its income, apart from Parliamentary grant, being derived from the rent of a farm, in the purchase of which the sum bequeathed by Dr. Gray for the foundation of this chair was, along with another fund (the Garth Bursary Fund), invested. The income of the chair from this source was estimated by the Commissioners of 1858 at £125, but we are informed that the actual income has not exceeded £90. It has been explained to us by the Professor (Q. 2068), as the cause of the over-estimate, that the College factor, at the time when returns were furnished to those Commissioners, had 'assigned an increase of some £55 to Dr. Gray's foundation alone, while in reality that increase should have been divided between the Gray and Garth funds.'

With the exception of the chair of Chemistry, regarding which the information laid before the Commissioners of 1858 led to their over-estimating its income from endowment to the extent of about £35, the average incomes of the chairs in the United College from endowment have in recent years fully come up to the estimate given in the Schedule to the Ordinance No. 21. The revenue of the College, which fluctuates to some extent from year to year with the price of grain, was there estimated at £1180, 18s. 10d., while in 1875-76, the last year for which returns have been furnished to us,

---

XIII. Finance—*St. Andrews.*

---

it amounted to £1398, 13s. 7d. This, however, is somewhat in excess of the income for previous years; but on the whole, the estimate stated in the Ordinance seems to have been a prudent one, and has not in general exceeded the income actually realized. The present incomes of the different chairs from endowment are therefore not unfairly represented by the sums set forth in the Schedule. It was stated in evidence by Principal Shairp, as one reason of the excess of income shown in the returns for 1875-76, that in that year for the first time the expense of coals and gas had been paid, not by the College, but from the funds of the University. The sum paid for this purpose, however, was only £55, so that it accounts only to a small extent for the excess. It seems quite in accordance with the provisions of the Ordinance that the University funds should be applied to meet such expenditure in the Colleges, so long as there is sufficient University income for the purpose after making provision for prior charges. The state of the University finance renders it probable that in future years similar relief to the College funds may be afforded.

The Principal, and also some of the Professors, of the College called our attention to the fact that inconvenience and difficulty had been caused by the Department of Woods and Forests having occasionally brought forward claims for arrears of teinds payable to the Crown from lands belonging to the College, after the teinds had been allowed to accumulate for years, and the amount had been expended or consumed by the College, in *bonâ fide* ignorance of the existence of any claim. It is true that, on application by the College, an allowance seems to have been subsequently obtained from the Treasury to compensate for losses which individual Professors had sustained by this procedure; but it is obvious that the finance of the College is exposed to serious and harassing disturbance when such claims for arrears are made. The members of the body who have to submit to them are probably not the same as at the time when the different arrears were incurred, so that persons who have derived no benefit from the previous failure of the Crown officials to make the demand, may have their incomes seriously diminished by a large accumulated claim being unexpectedly brought against them. It may perhaps be impossible to prevent cases of this kind from arising, but whenever they do occur, we are of opinion that the College, which has been in no fault, should receive compensation from the Treasury.

The Principal also called our attention to the inadequacy of the incomes of the different chairs in the United College, and pointed out that in several cases they were considerably below the amount

---

XIII. *Finance—St. Andrews.*

---

estimated in the Schedule to Ordinance No. 21. In illustration of this, he gave us a statement of the actual incomes as returned to the Treasury at Christmas 1875 on an average of the three previous years. The incomes so stated do not differ materially from the average of those returned to us; and undoubtedly, in the case of most of the chairs, they fall short of the estimates given in the Ordinance. As we have already explained, however, any deficiency of income under the estimate has not, except in the case of the chair of Chemistry, arisen from the former Commissioners having formed an over-estimate of the income from endowment. With that exception, the deficiency is due entirely to a deficiency in the income from class fees. The number of students in the United College, which apparently had shown a tendency to increase at the time when those Commissioners reported, has in recent years considerably declined, and the Professors' incomes have consequently exhibited a proportional falling off. It is to be regretted that the cause to which the diminution of income must be attributed makes it especially difficult to apply a remedy; but it may be hoped that St. Andrews, which in several respects has special advantages as a place of study, may in time attract more students to its classes.

In St. Mary's College, the returns show that the estimate of the College income given in the Schedule to the Ordinance No. 21 has been a moderate one. Indeed, in the ten years for which we have returns, the average income has exceeded by fully £200 the amount of £1115 stated in the Schedule. This excess, however, has been owing, in a considerable degree, to the fact that the College has recently made a change of investment of part of its property, by selling a farm which had been purchased about forty years ago, and investing the proceeds (£4500) in securities returning a higher rate of interest. The sum has been distributed equally over three investments, viz., the debenture of a Heritable Securities Association, returning  $4\frac{1}{2}$  per cent.; the funded debt of the Glasgow and South-Western Railway Company, at 4 per cent.; and a deposit with the Bank of New Zealand, at 5 per cent. From the increased income which these investments now give, as compared with the returns derivable from land, it may be expected that there will be for some time an improvement in the incomes of the three chairs in the College towards the support of which the free revenue is applicable, viz. the office of Principal and primarius Professor of Divinity, the Professorship of Divinity and Biblical Criticism, and the Professorship of Oriental Languages. We

---

XIII. *Finance—St. Andrews.*

---

think it right, however, to point out that any such change of investment of College or University property is a step which can be approved of only if calculated to be permanently beneficial. It may be that a sale of land which has been purchased by a corporate body within recent times is less open to objection than would be a sale of property which had formed part of its original endowment, or which had been granted to it in that form; but as a general rule, land is more advantageous as an investment for the property of a Corporation than a loan or other investment giving a fixed return in money, any alteration in its money value keeping pace for the most part with that of other commodities. Hence, although an immediate increase of income may be obtainable by converting land into money, and investing the proceeds otherwise, it may still not be advantageous for a corporation to make the change. Particularly may it be disadvantageous to do so where any present rise of income is applicable, not to the permanent benefit of the society, but mainly, at all events, to increase the emoluments of its existing members. We regard it as obvious that no sale of land belonging to any College or University should be resolved on except after careful consideration, and on clear grounds of expediency. When any step of the kind is proposed, it seems to us peculiarly to fall under the supervision of the University Court, in the exercise of its power of control over the administration of University and College property. We think, therefore, it should be made a rule that no such sale should be carried out without the authority of the University Court having previously been obtained.

While the incomes of the three chairs in St. Mary's College which receive a share of the College revenues may be expected for a time to benefit by the change of investment to which we have referred, the income of the fourth chair in the College, that of Ecclesiastical History, will not derive any advantage from the change. The endowment of this chair, apart from an annual allowance from Parliamentary grant, consists of one-sixth share of the revenues of the Deanery of the Chapel Royal. These revenues are obtained from the teinds of certain parishes; and it has been brought to our attention that for some years their amount has been diminishing, through the application of part of the teinds towards augmentations of ministers' stipends in the parishes from which the teinds are drawn. It may be anticipated that the income will still further diminish in future years from the same cause, as all income dependent on teinds is liable to suffer from time to time from such augmentations. There may be a difficulty in the case



---

XIII. *Finance—Glasgow.*

---

of Theological chairs in obtaining compensation for loss of income from the public funds; but the fact that such a difficulty is probable, should operate as an inducement to those who are interested in the prosperity of the Theological Faculties in the Universities to exert themselves to obtain an adequate provision for their support from other sources.

The stock or capital fund of the University of St. Andrews exhibits a marked increase since 1863, when the Commissioners under the Act of 1858 presented their Report. On 29th January 1863, the fund, as stated by those Commissioners, amounted to £15,455, 5s. 8d. In 1866–7, it had increased to £17,269; and in 1876–7, when returns were made to us, it had still further risen to £22,793, 12s. 9d.

For the last ten years, the surplus income has averaged fully £570 a year; and if the University continues to grant the full number of ten degrees in Medicine, which the Ordinance No. 19 enables it to grant, the income may be expected not to fall off.

It has been explained to us, that of the capital of £22,793, 12s. 9d., the sum of £1291, 10s. 9d. has been set apart from the surplus revenue of the last five years towards a fund for extending the buildings of the library and for preparing a library catalogue. For some years it may be desirable that part of the surplus revenue should be set aside for these objects; but even allowing for temporary payments towards them, and still more after they have been fully provided for, the University revenue may fairly be expected to admit, as it has recently done, of aid being given to the Colleges towards expenditure for teaching purposes. It would simplify the administration of the revenues of the University and the Colleges, for purposes which are common to all of them, if the three bodies were united into one corporation, as we think should be done under legislative authority.

*University of Glasgow.*

In the University of Glasgow, the ordinary revenues of the University afford the main source of endowment of thirteen of the professorships, and also to the extent of about £450 of the office of Principal. The chairs which thus receive support from the University revenues were all founded before the present century, and were known as the chairs constituting the College of Glasgow, as distinct from the University, until that distinction was abolished by the Act of 1858.

---

XIII. *Finance—Glasgow.*

---

Besides these chairs, there are fourteen other professorships in the University, which derive their endowment for the most part either from annual Parliamentary grant or from private benefaction. From the latter source the entire endowment of the recently founded Clinical chairs has been provided, as well as a considerable part of that of the chair of Engineering, Mrs. John Elder of Glasgow having given a sum of £5000 for its support. The professorship of Biblical Criticism, to which, on its foundation by the last Universities Commission, Your Majesty was pleased to grant one-sixth of the revenues of the Deanery of the Chapel Royal, has recently received an additional endowment of £140 a year under a bequest of the late Mrs. Black of Glasgow. This aid to the chair is the more opportune, that, as we have explained in reference to the chair of Ecclesiastical History in St. Andrews, the revenues of the Deanery are being gradually diminished through the grant from them of augmentations of ministers' stipends.

The professorship of Conveyancing is endowed with an annual sum of £105, granted by the Faculty of Procurators in Glasgow.

As regards the sums which are annually granted by Parliament for the endowment of certain professorships in Glasgow, several members of the *Senatus Academicus* have in their evidence dwelt upon it as a grievance, that to the extent of £800 a year these sums in effect represent an annual payment of that amount which previous to the year 1839 the University had received for general purposes. From the time of William III. down to about 1825, the University had enjoyed a valuable lease of the teinds of the archbishopric of Glasgow, in renewals periodically granted by the Crown for twenty-one years. About 1825 this lease was withdrawn, and an annual allowance of £800 given in lieu of it; but about 1839, on the foundation by the Crown of certain chairs in the Medical Faculty and the chair of Engineering, that allowance was also discontinued, and sums of an equal amount applied to the endowment of these new chairs. In this way, while the calls on the University for expenditure were increased by the institution of seven new chairs, its ability to provide for them was impaired by the withdrawal of an important item of its revenue. As Professor Blackburn, the chairman of the Finance Committee of the Senate, expressed it in his evidence (Q. 8597), 'it was a little hard on the University to have its income cut down and its expenses increased at one blow; this is one of the causes which made the University of Glasgow, which was tolerably well provided at the time, and had a small amount of working expenses, a poor University, with large working expenses and a small income.'

---

XIII. *Finance—Glasgow.*

---

Although on the part of the Professors who brought this subject under our notice, a hope was expressed that the grant which had been so long enjoyed by the University might in some shape be renewed, we cannot think it likely that this will be done now that it has been withdrawn for nearly forty years. At the same time, the evidence shows that the General Fund, to which the amount derived from this source would have been payable, and on which the University is dependent as a provision for its current expenditure, has been found to be insufficient for the demands upon it. The consequence has been, that for various important objects, such as the provision of assistance and apparatus, the payment of additional examiners for degrees, the support of the library, the remuneration of officials, and the like, the University has been unable to afford an adequate allowance, and in some cases has been obliged to refuse it altogether, to the prejudice of its efficiency as a University. This inadequacy of the General Fund has been more particularly apparent since the removal of the University to its new site, where the expenses for service, heating, lighting, insurance, and other purposes, have been necessarily increased in consequence of the greater extent of the buildings.

Independently of the diminution of its resources from the withdrawal of the grant to which we have referred, there are several causes which have contributed to the embarrassment in which the evidence shows that the University has been placed. Among these may be specially noticed the facts—(1) that a large proportion of the University income consisting of teinds, has suffered from periodical augmentations of ministers' stipends; (2) that in Glasgow the ordinary income is subject to special burdens for the support of the Observatory and the Hunterian Museum, and also for the maintenance of the buildings, the whole of the charge for which is thrown on the University, without any aid from Government; and (3) that in the erection of the University buildings on their new site, and the outlay connected with its removal, a large debt has been allowed to be accumulated, the interest on which has, as far as possible, although hitherto only to the extent of a part of the necessary amount, been provided for by payments from the General Fund.

As regards the first of these causes of embarrassment, it appears that the University income, to the extent of nearly one-half of the ordinary revenue from property, is derived from teinds. This income, being burdened with ministers' stipends, is constantly subject to diminution from periodical augmentations of the stipends. It was stated in evidence by Dr. Kirkwood, the Assessor in the

XIII. *Finance—Glasgow.*

University Court for the General Council (Q. 10,807), that through these augmentations the burden on the revenue had increased from £1075 in 1864, to £1900 in 1874; and he added (Q. 10,809), that the augmentation is always going on. 'Part of the revenue ' is derived from Govan parish, which is close to Glasgow, and ' there will always be augmentations there; and the same with ' regard to Renfrew, which is close to Paisley. I anticipate that ' in the course of a few years those revenues will be still more ' materially affected.' Dr. Kirkwood suggested (Q. 10,808), as the only remedy for this prospective loss of income, that the Government ' must take over those revenues, and fix a sum in lieu thereof.' This would no doubt be a desirable arrangement, if practicable.

The burdens on the revenue for the support of the Observatory and the Hunterian Museum are considerable. For the Observatory, it appears that in 1875-6, the last year for which returns are before us, the expenditure was £291, 7s. 9d. The allowance made for this purpose was stated by Professor Grant, the Professor of Astronomy, to be inadequate, but it can hardly be expected that the University will be in a position to increase it. On the Hunterian Museum there was in the same year an expenditure from the General Fund of £323, 1s. These two sums together form a charge of £614, 8s. 9d.

In addition, the whole expense of maintaining the University buildings is thrown on the General Fund. For these the expenditure in 1875-6 was £479, 9s. 0½d. The buildings at present are new, so that the expenditure is probably less than will be necessary in future years. Both in St. Andrews and in Aberdeen the whole charge for the maintenance of the University buildings has been undertaken by the Board of Works, while in Edinburgh an allowance of £500 has since 1869 been made to the University for the purpose. There can be no doubt that in Glasgow the University ought to be relieved of the charge for the buildings, or, at all events, that it should receive a grant in aid for the purpose, as in Edinburgh.

The difficulties in which the University has been involved by the existence of the debt which has been contracted in the erection of the new buildings, and the establishment of the University on its present site, have been very serious, and have been pressed upon our attention by the Professors who have adverted in their evidence to the subject of the University finance. Professor Veitch, for example, said on this subject (Q. 9589), 'The interest on this (the ' debt) is far beyond what the University has any means of paying. ' Out of the College funds we gave last year between £700 and

XIII. *Finance—Glasgow.*

‘ £800. But this is merely crippling the College revenues, which  
 ‘ ought to be devoted to educational purposes. I doubt even the  
 ‘ legality of this application of the College funds, but we have no  
 ‘ alternative, except that of ultimate bankruptcy.’

The amount of the deficiency of assets as compared with the expenditure and liabilities incurred in the erection of the new University buildings, is shown under the 17th head of the returns from the University of Glasgow, in a note appended to a letter, dated March 1877, from the Principal and others applying for subscriptions to aid in clearing off the debt. From this note it appears that while the buildings are still unfinished, there existed in May 1874 a deficiency of as much as £55,576, 12s. 3½d. of assets as compared with the expenditure and liabilities for works actually executed or necessary, the gross figures being these:—

|                              |          |    |    |
|------------------------------|----------|----|----|
| Expenditure and Liabilities, | £402,726 | 13 | 7½ |
| Assets,                      | 347,150  | 1  | 4  |

|                         |         |    |    |
|-------------------------|---------|----|----|
| Deficiency in May 1874, | £55,576 | 12 | 3½ |
|-------------------------|---------|----|----|

Since May 1874, the note states that subscriptions, in response to a new appeal to the public, had been announced to the amount of £27,540, 15s. 6d.; but, on the other hand, there had been an accumulation of interest on the debt to the extent of £4955, 5s. 4½d., this sum being again reduced, through sums advanced by the Senate from the ordinary revenues of the University, to the amount of £2010, 18s. 8d. In this way the total sum available for reduction of the debt was estimated in March 1877 at £24,596, 8s. 9½d., bringing the deficiency to £30,980, 3s. 6d. Even when this deficiency may be cleared off, there is still a further sum required to complete the buildings according to the original design, estimated at £71,200. Their completion, however, although of great importance for the satisfactory establishment of the University, is of secondary consequence compared with the extinction of the debt. As stated in the letter from the Principal and others to which we have referred:—‘ However desirable it is  
 ‘ that the University authorities should be enabled to proceed with  
 ‘ the completion of the fabric, it is not to be disguised that the  
 ‘ greatest present hindrance to the efficiency of the University arises  
 ‘ from the heavy debt with which its resources are burdened, and  
 ‘ that therefore it is for the liquidation of that debt that the assist-  
 ‘ ance of the public is most urgently needed.’

For such explanation as has been given to us of the way in which the expenditure was allowed so largely to exceed the available means, we must refer to the evidence of Professor

---

XIII. *Finance—Glasgow.*

---

Allen Thomson, who was chairman of the Building Committee of the Senatus, and also to that of Dr. Kirkwood.

Professor Allen Thomson says (Q. 2914): 'How the imprudence, 'as it may be called, of going on with the expenditure when the 'risk of being in debt arose, I should find it very difficult to explain, 'because it went on insensibly, and occasionally we were not sufficiently informed as to parts of the expenditure which it was 'extremely difficult to avoid.' He explains subsequently (Q. 2917) that considerable changes were introduced in the arrangements during the progress of the building; that it became necessary to remodel the plan in order to obtain access on the north front; and that changes were made in the departments of Chemistry, Anatomy, Natural History, and Botany, for which the provision as originally planned was inadequate.

Dr. Kirkwood was asked (Q. 10,805) whether the real origin of the financial difficulties of the University had not been that the estimates were largely exceeded, owing to the unexpected rise in the price of labour. He replied:—'That has been said, but it is not 'true to the full extent to which it has been said. The price of 'labour was not of itself the only cause, because the estimates 'were also largely exceeded, in consequence of accommodation not 'having been foreseen and provided for.' He added (Q. 10,807), 'The additions and alterations amounted to £25,000, and the 'fittings not provided for in the estimates, £21,000.'

In the construction of so large a building, it may have been difficult to avoid a certain excess of expenditure over the estimates; but it seems evident that, with the exercise of due care and with proper supervision, no such excess as has been incurred should have been possible. It would now, however, serve little purpose to inquire on whom the responsibility of having allowed the University to be involved in such a serious load of debt must mainly be laid. We think it necessary to point out that none of the Universities is entitled to burden its revenues with debt for any purpose whatever; but in the circumstances, the vital question to which the University of Glasgow must earnestly address itself is in what way the existing burden may be removed as soon as possible.

We have stated that in March 1877 the deficiency for existing or necessary works and liabilities was estimated at £30,980, 3s. 6d. Since that date a supplementary statement has been furnished to us by the University, showing that further subscriptions, including a second subscription of £5000 from the corporation of the city of Glasgow, had been announced, by which the estimated deficiency

---

XIII. *Finance—Glasgow.*

---

was at 31st December 1877 reduced to £19,273, 17s. It is also stated that that sum exceeds the actual amount of the debt existing at present on the University buildings, inasmuch as it includes certain items of deficiency as distinguished from proper debt, the most important of these being an unexpended balance of a sum estimated as required for necessary works, such as museum and laboratory fittings, painting, etc., which, however, must be provided for. In this way the debt actually existing on 31st December 1877 was stated as amounting to £12,575, 7s. 1d.

It is satisfactory that so much progress has been made in providing for the existing deficiency; and the University is to be congratulated on the substantial interest in its prosperity which the large contributions received from the public of Glasgow and the West of Scotland evince. It may be hoped that these may continue, and certainly the University authorities should not in any degree relax their endeavours to obtain as far as possible in this way the means of extinguishing the debt. No object should be allowed to interfere with what is their primary duty, to have the institution entirely freed from such a burden.

Apart from additional subscriptions from the public, various expedients have been suggested in the course of the evidence for attaining that object. After the liberal contribution of £120,000 allowed by Parliament from the public funds, we cannot recommend that further aid from that source should be given. It is true that that contribution has been considerably exceeded by the sum received from local subscriptions, these having amounted already to about £150,000, in addition to above £70,000 contributed for the erection of a hospital in the neighbourhood of the University. But the sum of £120,000 was that which the Government originally agreed to place in the estimates and to recommend to Parliament for the object; and we do not think that an addition to it could reasonably be claimed, on the ground either that the University had incurred a larger expenditure on the building than was contemplated, or that the local subscriptions had exceeded the amount contributed from the public funds.

It has been suggested, indeed, that although a further contribution from the public funds may not be obtained, it might be possible and desirable, with the view of keeping down the interest on the debt, to obtain a loan of money from the Public Works Loan Commissioners. Dr. Kirkwood (Q. 10,809) says: 'With regard to the debt, it appears to me that if Government do not see their way to help us to pay it off, they should lend us the money. The Commissioners of Public Works should lend us money at a

---

XIII. *Finance—Glasgow.*

---

‘ reduced rate of interest to keep down the accumulation of interest. I suggested that a considerable time ago to some members of Parliament, and they said there was no precedent for such a thing. But there is a precedent. By the Act 5 Geo. IV. cap. 36, power was given to the Commissioners of Public Works to make advances to the Colleges of Oxford and Cambridge for twenty years. Of course Government is very apt to ask for a precedent in such a case.’

Assuming that such an arrangement is practicable, it is apparent that it could serve only as a temporary expedient. The burden of the interest, although lessened, would still require to be met; and no measure can be satisfactory which does not contemplate the entire and speedy extinction of the debt. As long as any portion of the debt remains, the University is crippled in the means necessary for carrying on its work with efficiency.

With the view of meeting the pressing necessity of clearing off the debt, an important suggestion has been brought before us, that there is in possession of the University a valuable property in the Hunterian collection of coins and medals, a sale of which, it is said, would produce a sum more than sufficient for the purpose. This collection forms part of the museum bequeathed to the University by the will and codicil of Dr. William Hunter in 1781 and 1782. It is not a systematic collection applicable to any particular age or country, but seems to have been made promiscuously by Dr. Hunter, as he had opportunity from time to time of obtaining specimens of rare coins. He spent as much as £22,698 in making it; and that its money value is great is evidenced by the fact that in 1807, before the cabinet was removed from London to Glasgow, the trustees of the British Museum offered the College the sum of £20,000 for the divisions of two of the series alone, besides undertaking to return all the duplicates, together with casts from the originals of those that were kept. The value of the collection as an asset of the University property, which, although of no practical utility as retained by the University, would if disposed of realize a large sum of money, was specially referred to in a Report on the buildings of Glasgow University by the Commissioners under the Act of 1858. Those Commissioners there state that they had been assured by persons of skill that if the collection were now brought to public sale, it would in all probability realize at least the sum which Dr. Hunter paid for it. Valuable as it is, however, the collection can hardly be said to confer any benefit on the University; and, indeed, is practically inaccessible to the artist, the scholar, and the public. The small room which con-



XIII. *Finance—Glasgow.*

‘tains it cannot be opened without the presence of three Professors, each of whom is the appointed keeper of a key to one of the three locks which secure it. It is therefore very rarely opened at all. While it is questionable whether such a collection be of any direct value for educational purposes, it is certain that it could not with safety be made available for any purpose without such an annual expense as the University cannot be expected to bear.’

Since the removal of the University to its new site, the regulation requiring the presence of the custodiers of three different keys when the collection is shown has been modified; but still such precautions are necessarily used when it is exhibited as in effect to prevent the collection being accessible to the public, and for the educational purposes of the University it is admittedly of no practical value. Professor Young, who is curator of the Hunterian Museum, explained to us the conditions under which the coins are shown, and he was asked:—

‘1786. Do you think that the possession of the coins is a matter of great value to the University or Museum?—It is of absolute indifference to the University or Museum, seeing that the coins are not made use of in teaching. The only people to whom they are of interest—and that largely because of their mystery—are the inhabitants of Glasgow, who think it matter of pride that there should be this great collection of coins. It is the only unemployed capital that Glasgow possesses.’

‘1787. Supposing you had a chair of History instituted in the University, do you think that the coins might be made available in that department?—I believe that if the British Museum or South Kensington would take the coins, there would still be sufficient left of the duplicates to provide ample materials for teaching purposes. But the value of the collection lies in those coins that would be absolutely uninteresting, indeed useless, to the ordinary student in a class of history.’

Looking to the inutility of the collection to the University, Professor Young expressed an opinion favourable to its being sold. In regard, however, to the application of the proceeds, he stated that he objected to their being thrown into the general University fund, and he desired that they should be invested as a special fund for the maintenance of the Museum. The ground assigned by him for this view was, that the Museum ‘is not University property, but still the property of a trust.’

Professor Nichol also advocated the propriety of disposing of the coins, and he thought that the money should be applied towards the

XIII. *Finance—Glasgow.*

liquidation of the debt. 'There is a means,' he said (Q. 3780), 'it seems to me, within the control of the University authorities, with the assistance of Parliament, for diminishing this almost intolerable load. You are aware that we have had in the Hunterian Museum for many years a collection of very valuable coins, which has hardly been seen by anybody. I have never seen them, although I have taken great interest in the Museum, and attended the Natural History classes when I was a student; and very few, I believe, of my colleagues have seen them; *a fortiori*, very few of the outer public. . . . It is a very reasonable means of diminishing this serious debt that we should be enabled to dispose of these coins to the best advantage.'

In this view we concur. The University derives no benefit from the collection, nor, as was pointed out by the Commissioners of 1858, can it be made available for any purpose without such an expense as the University is not in a position to afford. Even had the building debt not existed, we should still hold the opinion that the coins should be sold, and the proceeds applied towards the educational purposes of the University; but considering the difficulties which the debt causes, we entertain no doubt that its extinction is the object to which the sum obtained should, if necessary, be devoted in the first instance. As regards any objection on the supposed ground that the Professors, or a portion of them, hold the coins as trustees, we think it enough to state that the parties whom it was Dr. Hunter's declared intention to benefit were the University itself and its members;\* and if the coins are to be sold, as we think they should be, the best way in which the proceeds can be used for the advantage of the University is in freeing it of an encumbrance by which its usefulness is seriously impaired.

Should the debt be cleared off from any other source, we are still of opinion that authority should be obtained for a sale of the coins. We think that the proceeds, in as far as they may not be required for payment of the debt, should be formed into a special fund, to be called the 'Hunterian Fund,' the income of which should be used in aiding the various departments of the University in their educational work.

Of the want of a fund of this kind in the University of Glasgow we have had ample evidence in the course of our inquiry; and we think that were it provided by a sale of the Hunterian coins, it

\* See extract from Dr. Hunter's will, in so far as it relates to the bequest of his Museum, given in the second volume of Evidence before the Universities (Scotland) Commission of 1826-30, p. 541.

---

XIII. *Finance—Aberdeen.*

---

would not be inconsistent with the main design of benefiting the University evinced in Dr. Hunter's will. He was a man of wide and general culture, and the express object of his bequest was 'the improvement of the students in the University of Glasgow.' No better way of meeting that object could be found than in the institution of a special fund for the extension and improvement of the teaching capabilities of the University.

While we recommend that, under any circumstances, the University authorities should be empowered by Parliament to dispose of the coins, we think it right also to recommend that they should be empowered to sell them in any way, whether publicly or privately, that may seem likely to be most advantageous. It is not impossible that by selling the coins by auction, whether in sets or separately, a considerably larger sum may be obtained than if they were sold as an entire collection. We think, therefore, that in the conditions and mode of sale the University should be left unfettered.

To the Museum of Dr. Hunter there is attached a library, containing about 12,000 volumes, also bequeathed by him to the University. The books are said to be of great antiquarian value, embracing a unique collection of books printed before 1500, and include thirteen specimens of Caxton's printing, and a good many by Pynson and Wynkyn de Worde, and other early printers. Such rare specimens of printing may be ornamental additions to the Library, but they cannot be regarded as of any use for educational purposes. They would, however, fetch a large sum if sold; and if it were necessary, we should recommend that they should be disposed of as well as the collection of coins, and that the proceeds should be similarly applied. Probably, in the meantime, it may be sufficient if authority is obtained for the sale of the coins.

*University of Aberdeen.*

In the University of Aberdeen, the union of King's College and Marischal College by the Act of 1858 into one University and College rendered it necessary for the Commissioners under that Act to make an entirely new arrangement as to the application of the revenues of the two Colleges for the purposes of the united University. The details of the arrangements made by them are contained for the most part in their Ordinance No. 6, and also to some extent in Ordinances Nos. 12, 27, 33, and 74.

The first of these Ordinances sets forth in a Schedule the estimate which the Commissioners had made of the income appli-

---

XIII. *Finance—Aberdeen.*

---

cable to the support of the different chairs from endowment and class fees. From class fees the incomes derived have, owing to the general prosperity of the University, for the most part exceeded the estimate stated in the Schedule, and in few instances, except in the Faculty of Divinity, have they fallen below it. The class fee in this Faculty in Aberdeen is lower than in any of the other Universities, being only £1, 11s. 6d., as compared with £2, 2s. in Edinburgh and St. Andrews, and £3, 3s. in Glasgow. We have in a previous part of the Report recommended that the fee should in each of the Universities be raised to the same rate as in Glasgow. Through this increase the incomes of the Theological Professors from fees may be expected to amount to the estimate given in the Ordinance.

As regards the incomes from endowment, the estimates made by the Commissioners seem in general to have been fair, and to agree very closely with the average incomes actually received. In some cases they have been slightly exceeded by the actual incomes, but not to any great extent. An excess may in some of the chairs be somewhat greater in future years, owing to a recent judgment of the Court of Session, which has been affirmed by the House of Lords, in an action at the instance of the University against the Town Council of Aberdeen. Under that judgment, the beneficial interest in the rents of certain lands and fishings in the neighbourhood of Aberdeen has been found to belong to the Coupland and Liddell foundations in the University, and not to the town of Aberdeen. The income of the Coupland foundation, which was formerly receivable by the Professor of Divinity in Marischal College, is under the Ordinance No. 6 applicable to the support of the professorship of Church History; while that of the Liddell foundation is shared in certain proportions by the professorships in the Faculty of Arts. What may be the precise increase of income to these different chairs in consequence of the judgment cannot yet be stated with certainty, as the decision in the House of Lords was given so recently as on 16th March 1877, and its effect could not be shown in the returns with which we have been furnished. It is stated, however, in a note to the returns by the University, that in the case of the chair of Church History the increase may probably amount to about £80 yearly; in the case of the chairs of Logic, Moral Philosophy, Natural Philosophy, and Natural History to about £28 each; and in the case of those of Greek, Humanity, and Mathematics to about £18 each.

In Aberdeen, the incomes of the Professors, in as far as they are

---

XIII. *Finance—Aberdeen.*

---

derived from the University revenues, consist in general of fixed shares of these revenues, after deduction of burdens. There is undoubtedly, as was pointed out in the General Report of the Commissioners of 1858, a certain risk incident to a system of treating the free revenue as a fund to be divided among the Professors. Where the revenue arises from land rents, and sums are borrowed for expenditure on improvements, it may be uncertain how far an increase of rent obtained by such expenditure may be permanent or temporary. Unless, therefore, due provision is made, by means of an annual charge, for repayment within a limited time of the money borrowed, the application of the whole free income of each year to the support of Professors may result after a time in the revenues being encumbered with the interest of an expenditure from which the University has ceased to derive benefit. The Commissioners of 1858 state in their Report that, but for the fact that the revenues were insufficient to enable them to adopt a different system, they would have thought it preferable to fix a definite sum, within the amount of the free yearly revenue, for the remuneration of Professors, and to leave any surplus to be applied to the general purposes of the University. This arrangement has always existed in Glasgow, the salaries of the Professors from University revenues consisting of fixed money payments, amounting in all to less than a half of the free revenue, while the remainder has been used for current expenditure, and in so far as not required for that purpose, added to the capital stock. There is no doubt that, where such a course is practicable, it is safer than dividing the free revenue among the Professors, as has been the system in Aberdeen, and also in the Colleges in St. Andrews. At the same time, the management of the University property in Aberdeen seems, as far as can be judged from the materials before us, to have been careful and prudent; and there is no evidence to lead to the conclusion that larger sums have been divided among the Professors than the revenue could fairly warrant.

The General University Fund which was established by the Ordinance No. 12, for defraying the ordinary current expenses of the University, has during the ten years ending with 1876, for which we have had returns, produced an average annual income of £2401. This is exclusive of the yearly payment to the library from the public funds of £320, as compensation for the loss of the privilege of Stationers' Hall, formerly enjoyed by the University.

The income of the General Fund has varied considerably in different years, but on the whole it has gradually increased from £2247 in 1867, to £2872 in 1876. The increase has been mainly

---

XIII. *Finance—Aberdeen.*

---

observable in that portion of the revenue which is derived from the examination fees of candidates for graduation in Medicine, these fees having in 1876 amounted to £1460, as compared with £865 in 1867. There has also been an increase in the amount received from the surplus income of the Adam foundation, under Ordinance No. 33, the amount from this source having been in 1867 £178, and in 1876 £323. This increase may be expected to continue, as through the extinction of a debt which existed on the University manse, the Adam fund has been relieved of an annual charge to provide for the debt imposed on it by that Ordinance.

The grants from the General Fund for class assistance and apparatus have properly been raised as occasion required, and as the increase in the fund rendered possible. Thus the allowance for these purposes, which in 1867 was £334, was in 1876 £558.

Under the Ordinance No. 12, the 'residue' of the General Fund in Aberdeen, after the expenses of the year are met, is made 'applicable to the purposes of the library or libraries of the University,' while in the other Universities there has been no similar special appropriation of the surplus income by Ordinance, the University authorities being left to apply it consistently with the objects for which the fund was instituted in the way they may think best. In Aberdeen, besides part of the librarian's salary, amounting on the average to about £136, the library has, under the appropriation of the residuary revenue by the Ordinance, received annually a considerable sum, amounting to about £491 a year. In 1875 the residue paid to the library amounted to £756, and in 1876 to £510. This apparent diminution in the last mentioned year is explained as having arisen in some measure from the payment in that year of £195 for law expenses, the greater part of which, however, it was expected, would be repaid to the General Fund in 1877, the action against the Town Council of Aberdeen, in which they had been incurred, and to which reference has already been made, having been decided in favour of the University. The diminution of the residue received by the library in 1876 was also attributable in some degree to the fact that a considerable addition had been made in that year to the grants for class expenses and apparatus. From the payment of the residuary balances of the General Fund to the library, the returns show that a considerable surplus library fund has been accumulated, amounting in April 1877 to £3504. Of this amount, however, it is explained that £901 forms the balance of a sum of £2100 allocated, under a scheme approved by the Senatus, and sanctioned

---

XIII. *Finance—Aberdeen.*

---

by the University Court, for the purchase of books, and that it would probably be expended in the course of 1877.

It has been represented to us that this compulsory application of the residue of the General Fund in each year to the library is inexpedient; that it creates an interest on the part of some of the Professors to grudge expenditure on other important University objects, with the view of leaving as large a surplus as possible available for the library; and that it would be better that the administration of the fund, and particularly the application of the residue, should be left to the discretion of the University authorities, as is the case in the other Universities. On what ground a different arrangement was made by Ordinance in Aberdeen is not very apparent. Possibly, as has been suggested, the Commissioners of 1858 may have been influenced to make an exceptional provision in favour of the library there, by the fact that the compensation grant for the privilege of Stationers' Hall is considerably smaller in Aberdeen than in any of the other Universities. Perhaps the explanation of the difference may simply be that the Aberdeen Ordinance was prepared before the others, and that on consideration, the Commissioners thought it preferable to leave the administration of the fund free, as they subsequently did, to having its application fettered as in Aberdeen. Certainly it seems to us that the Aberdeen Ordinance should be assimilated in this matter to those for Edinburgh and Glasgow, and that the appropriation of the residue should not be tied down as it now is. The library is unquestionably an important object of the fund, and ought to receive adequate support from it, as far as is consistent with a due regard to other objects of expenditure. But if the residue is considerable in any year, the proper course in general, and in the absence of some call for special expenditure, is to make an addition to the capital of the fund itself, and not to create a special capital for one of its purposes. Again, it may be of importance occasionally to aid the means of teaching in particular branches by the purchase of expensive apparatus. On the whole, we are satisfied that the application of the surplus in each year should be left in the discretion of the University authorities.

There can be no doubt that the salaries of assistants, where these are required, or would be of advantage, form a proper object of application of the General Fund. Grants from it are now made for this purpose in Aberdeen, although it would appear from the evidence that at one time it was thought by some members of the *Senatus Academicus*, that the absence of express mention of assistants' salaries in the clause of the Ordinance as to the objects

---

XIII. *Finance—Edinburgh.*

---

of expenditure of the General Fund made it illegal to apply it towards their payment.

The Commissioners under the Universities Act, although they made no provision by Ordinance for the formation of a 'Reserve Fund' in Aberdeen, as they did in St. Andrews, yet recommended in their General Report that a fund of that kind should be formed, as a provision against contingencies. Such a fund they stated that they considered peculiarly important, 'in a University which depends so largely for its general income on the fees of students and of candidates for degrees.' Towards the formation of a Reserve Fund, the Commissioners recommended that not less than 5 per cent. of the income of the General Fund should be set apart. This recommendation has been wisely followed by the University, so that in 1876 a Reserve Fund had been formed amounting to £1848.

*University of Edinburgh.*

In the University of Edinburgh, the incomes of most of the Professors consist in general of fixed payments, either from the annuity of £2170 payable to the University out of the revenues of Leith harbour, under the Act 24 and 25 Vict. c. 90, or from the public funds by annual Parliamentary grant. Some of the professorships are also provided with special endowments from foundations by private persons or public bodies. In the Faculty of Arts, each of the professorships founded up to the year 1872, with the exception of those of Engineering and of Sanskrit and Comparative Philology, receives, in addition to the salaries shown in the Ordinance No. 23, an annual payment from a bequest to the University by the late Sir David Baxter, Bart., for the further endowment of the chairs in that Faculty. The bequest, which was of a sum of £20,000, amounted, after payment of legacy duty, to £18,000; and the appropriation of the income was left to the University Court. Under a scheme of appropriation by the Court, dated 13th October 1873, the income is, after payment of expenses, divided into thirty-five equal parts, of which three are attached to each of the professorships of Humanity, Greek, and Mathematics; four to each of the professorships of Natural Philosophy and Rhetoric; six to each of the professorships of Logic and Moral Philosophy; and one to each of the professorships of History, Practical Astronomy, Agriculture, Music, Geology, and Commercial and Political Economy. The income of the fund is at present £720 a year, and the annual expenses about £19.

As regards the two chairs—those of Engineering, and of Sans-



XIII. *Finance—Edinburgh.*

krit and Comparative Philology—excepted by Sir David Baxter from the operation of this bequest, that of Engineering has, as we have stated in a former part of the Report, an endowment of about £400 a year, of which about £200 is the interest of a sum given by Sir David Baxter himself, and £200 is derived from annual Parliamentary grant. The chair of Sanskrit and Comparative Philology was originally endowed by John Muir, Esq., D.C.L., LL.D., with the interest of a sum of £4000 made over by him to the University for the purpose, and it receives also an annual sum of £200 from Parliamentary grant. Dr. Muir has since given additional sums of £1000 and £1250 for the further endowment of the chair, making in all £6250 given by him for the purpose.

The Professor of Agriculture has, since the Commissioners under the Universities Act presented their Report, received an additional salary of £300 a year, partly from the Highland and Agricultural Society of Scotland, and partly from Parliamentary vote.

We have already explained the nature of the endowments provided for the new chairs which have been founded in Edinburgh since 1872, viz., those of Fine Art, which is as yet in abeyance, and of the Theory, Practice, and History of Education.

In other respects, the endowments of the different chairs remain generally as they were fixed by the Ordinance No. 23 of the Commissioners under the Universities Act.

The fact that the endowments of the chairs in Edinburgh consist either of fixed payments in money or of the interest of special funds appropriated for their support, as distinguished from the income of property belonging to the University generally, makes the administration simpler than it is in some of the other Universities. An exception to this rule exists in regard to the professorship of Music, for which certain payments, in accordance with a judgment of the Court of Session, are provided from the fund bequeathed to the University by the late General Reid, while the surplus revenue after that provision has been made, is applicable to the support of the library and to other purposes of the University. From this surplus revenue the University receives an income which has varied somewhat in different years, but which seems fairly represented by the sum of £906, the amount received in 1876.

In addition to the surplus revenue from the Reid fund, the University has for general purposes the income of the fund bequeathed to the University by the late Sir Joseph Straton, 'for the promotion and advancement of science, literature, and general purposes of education in the said University, in such manner as the Principal and Senatus Academicus for the time being shall

XIII. *Finance—Edinburgh.*

‘ see fit.’ The income of this fund in 1876 was £540, which also affords a fair representation of the annual amount.

Apart from the income arising from these two special foundations, the General Fund of the University receives the surplus income of the Leith Harbour Annuity over the fixed payments to Professors and to bursars. This income varies slightly from year to year, in consequence of casual vacancies in the professorships to which it is applicable. In 1876 it amounted to £747. From dividends and interest on investments, the receipts of the General Fund in the same year were £494.

The greater part, however, of the income of the General Fund is derived from matriculation and graduation fees, and these, owing to the prosperous state of the University, have produced a large, and for some years a steadily increasing, income. This is apparent by contrasting the receipts in 1867 and in 1876 from the most important sources under this head, viz. matriculation fees and graduation fees in Arts, Medicine, and Science respectively. The receipts from these sources in the two years were as follows:—

|                               | Year 1867.   | Year 1876.   |
|-------------------------------|--------------|--------------|
| 1. Matriculation Fees, . . .  | £1496        | £1994        |
| 2. Arts Graduation Fees, . .  | 189          | 329          |
| 3. Medical Graduation Fees, . | 1538         | 2629         |
| 4. Science Graduation Fees, . | 29           | 152          |
|                               | <u>£3252</u> | <u>£5104</u> |

This affords a satisfactory indication of the progressive prosperity of the University in some of its most important departments; and while it is most desirable that further assistance should be given to the University to strengthen its teaching power, particularly in the scientific branches, the increase in its income from its prosperous condition has in itself tended to add to its prosperity, by enabling the University to provide for a more liberal expenditure on various objects than it could previously afford.

The increased expenditure is apparent from the returns, and applies to the greater part of the working staff of the University. The only department of the University for which no provision whatever seems to have been made is that of the Board of Curators for the administration of the patronage formerly in the hands of the Town Council. We think that a small allowance, which probably need not exceed £15 or £20 a year, ought to be made to the secretary of the Board from the General Fund, out of which he should be expected to provide for any necessary expenditure connected with its meetings.

The maintenance of the University buildings formed at the date

---

XIII. *Finance.*

---

of the Report of the Commissioners under the Universities Act a burden on the General Fund. Those Commissioners recommended that the charge of the buildings should be undertaken by the Board of Works. That course has not been followed, but an annual grant of £500 has since 1869 been made by Parliament for their maintenance. When the new buildings—which are urgently required for the accommodation of the medical school—have been erected, the annual charge for maintenance must necessarily be increased. We think that the charge of upholding the whole buildings should then be undertaken by Government.

It has been the practice in Edinburgh for a number of years for the *Senatus Academicus* to give yearly in the University Calendar a statement showing the position of the funds and the income and expenditure of the University for the last financial year. The publication of this statement affords to persons interested in the University the means of knowing its financial position, and is proper and advantageous. A similar practice has now for some years been followed in Glasgow. Neither in St. Andrews nor in Aberdeen is there as yet any similar publication of the accounts in the Calendar; but we think that the usage which has been adopted in Edinburgh and in Glasgow ought to be followed in these Universities also.

Before passing from the subject of the finance of the different Universities, we think it right to call attention to the conclusions arrived at on this subject by the Royal Commissioners on Scientific Instruction and Advancement in Science, who in their Seventh Report, dated 18th June 1875, explained the results of the evidence they had received regarding the Scotch Universities, and pointed out the necessity which exists for affording them additional aid from the public funds for the purposes of scientific education. Those Commissioners received evidence from Edinburgh, Glasgow, and St. Andrews only, no evidence having been furnished on the part of the University of Aberdeen. It appears from a correspondence between those Commissioners and the Principal and Secretary of the Aberdeen *Senatus*, set forth in the Seventh Report, that an opportunity was given to Aberdeen, as to the other Universities, to lay evidence regarding their position before the Commissioners, but of that opportunity advantage was not taken. On what grounds the Aberdeen *Senatus* declined to furnish evidence to that Commission we have not been fully informed. The only reason assigned in the correspondence is contained in a letter from the Secretary of *Senatus*, dated 8th April 1872, in which it is stated

---

XIII. *Finance.*

---

that 'the Senatus is of opinion that it has nothing special to communicate to the Commission.' The result has been, that the Commissioners, being able only, as they informed the Senatus, to report on what might be given in evidence before them, did not include Aberdeen among the Universities in regard to which they were in a position to make recommendations. In Scotland, therefore, their recommendations relate to the Universities of Edinburgh, Glasgow, and St. Andrews only. In these recommendations we so entirely concur that we repeat them here.

In regard to Edinburgh, the conclusions and recommendations of those Commissioners were:—

'78. The resources of the University of Edinburgh are comparatively small, and it would be unreasonable to expect from local sources contributions sufficient for the complete removal of the defects which we have noticed.

'79. We are therefore of opinion that, considering the largely increased numbers of students attending the University, and the demand now universally made in all the great centres of national education for scientific instruction of a very complete and practical kind, the University of Edinburgh has established a claim to increased assistance from Government.

'80. We recommend that such assistance should be given, both in the form of a capital sum in aid of a scheme of extension, such as that to which our attention has been specially directed, and of an annual grant sufficient to enable the University to increase the number, and in some cases the emoluments, of assistants; to make more ample provision of apparatus for teaching; and to revise the salaries of the scientific Professors, regard being had to the disparity of their endowments, and to the income which they derive from fees.

'81. We further recommend, as we have already done in the case of Owens College, Manchester, and the Metropolitan Colleges, that the grant of the capital sum in aid of the extension of the University should be contingent upon the receipt of substantial contributions from private sources; and that an account of the expenditure of any annual grant be submitted to the Government, with a view to the exercise of Parliamentary control.'

In regard to Glasgow, the conclusions and recommendations of the Commissioners were these:—

'111. Upon a review of this evidence, we are of opinion that an increase in the payments on account of assistants to the scientific Professors is essential to the promotion of the teaching of science in this University; and we recommend that the Government

XIII. *Finance.*

‘grant be augmented sufficiently to permit the University to make this increase, and to raise the salaries of the scientific Professors, regard being had to the disparity of their endowments, and to the income which they derive from fees; an account of the expenditure of this annual grant being submitted to the Government, with a view to the exercise of Parliamentary control.’

In the case of St. Andrews, the conclusions and recommendations were the following:—

‘140. The University of St. Andrews enjoys an admirable situation, and it is supported by the traditions and associations of a long and interesting history; it needs, we believe, in order to the full development of its usefulness for the purposes of scientific instruction, only such assistance as will enable the Professors to give efficiently that education which, with the limited means at their disposal, they are now endeavouring to provide.

‘141. We recommend that such assistance should be afforded by an increase of the Government grant sufficient to enable the University to provide the Professors with an adequate staff, and with the proper appliances for instruction in science; and to revise the salaries of the scientific Professors, regard being had to the disparity of their endowments, and to the income which they derive from fees; an account of the expenditure of the annual grant being submitted to the Government, with a view to the exercise of Parliamentary control.

‘142. If this be done, we see no reason why the University should not be able, without dismemberment or removal, to enlarge considerably the area to which its benefit extends.’

We regret that evidence was not presented to those Commissioners regarding the position and wants of the University of Aberdeen. Had it been placed before them, we cannot doubt that the claims of that University for Government aid towards its scientific teaching would have appeared to them not less strong than those of the other Scotch Universities. Indeed, the success obtained in various open competitions by students educated at Aberdeen, and the marked increase which has taken place in the number of its medical students, afford ample evidence of the zeal with which scientific studies are being pursued in that University; and, as its available resources are limited, the University is well entitled to ask not to be postponed to any of the other Universities in any appropriation of public funds for providing the scientific Professors with adequate endowments, and with due assistance and appliances for instruction in science.

---

*XIV. Buildings, Libraries, and Museums.*

---

**XIV. THE CONDITION OF THE UNIVERSITY BUILDINGS, LIBRARIES, AND MUSEUMS, AND THE PROVISION FOR THEIR MANAGEMENT, MAINTENANCE, AND EXTENSION.**

In the course of the previous part of our Report, we have had occasion more than once to refer incidentally to some of the subjects embraced under the last head of our inquiry, viz. the condition of the University Buildings, Libraries, and Museums, and the Provision for their Management, Maintenance, and Extension. It will now, therefore, be sufficient to supplement what we have previously said on these subjects.

As regards the buildings of the different Universities, the charge of maintenance in St. Andrews and in Aberdeen has now for some years been undertaken by the Board of Works. This course was recommended by the Commissioners of 1858 as most desirable in regard to all the Universities, and they pointed out in their Report how inexpedient it was to leave the maintenance to the Universities themselves, none of them being possessed of sufficient funds for the purpose. The impolicy of trusting to the University resources for the repair of the buildings had been made apparent in the cases of St. Andrews and Aberdeen, the buildings of both these Universities having, within a short period of each other, been allowed to fall into a ruinous condition, and the Government having been called upon to restore them, and to undertake their charge under very unfavourable circumstances.

In the view entertained by those Commissioners we entirely concur, that the most expedient course in regard to the buildings of all the Universities is, that their charge and maintenance should be undertaken by the Board of Works. In Edinburgh, a special annual grant of £500 has since 1869 been given by Parliament for the maintenance of the buildings; and where the charge has not been undertaken by the Department of Works, it is well that a special fund should be provided, which it is the duty of the University authorities to apply to that purpose, otherwise the repair of the buildings is apt to be neglected among a number of competing claims on the University income. We think it, however, preferable that the entire charge should be undertaken by a skilled department like the Board of Works. The *Senatus Academicus* of a University may not contain members sufficiently conversant with building operations to direct the repairs in the most judicious way. It is safer, therefore, to have them entrusted to the care of the Board of Works. As we have already said, we recommend that this course should be adopted in Edinburgh when the new buildings are erected.

XIV. *Buildings, Libraries, and Museums.*

Glasgow is the only University in Scotland which does not receive aid from Government for the support of its buildings. The buildings, although incomplete, are new, and therefore we believe at present in good repair. While we cannot recommend that the Government should give a further grant, either to complete the buildings or to clear off the debt which has been incurred, we think that the maintenance of the existing buildings should now be undertaken by the Board of Works. Failing the adoption of that course, we recommend that an annual grant for their maintenance should be obtained from Parliament, as has been given in Edinburgh since 1869.

In Edinburgh, apart from the question of maintenance, it is urgently required, in the interest of the University, that the scheme for the extension of the buildings should be carried out without delay. On this subject the Principal of the University, on 3d June 1876, laid before us a copy of a memorial which had been prepared, and which has since, we believe, been presented to the Lords Commissioners of the Treasury, on the part of an acting committee appointed to carry out resolutions for the extension and improvement of the University buildings, adopted by a public meeting held on 6th April 1874.

In this memorial it is stated—

‘That the present buildings of the University of Edinburgh were devised during the last century, at a time when the students numbered between 600 and 700, and the Professors of the University 21 ;

‘That the students of the University are now over 2000 in number, and the Professors 36 ;

‘That, as was pointed out by the Royal Commission on Scientific Instruction, presided over by the Duke of Devonshire (Seventh Report, p. 10), the present buildings afford only eighteen classrooms, whereas no less than forty distinct courses of instruction have to be provided for, by which circumstance much inconvenience is occasioned ;

‘That the University of Edinburgh has long contained the largest and most important Medical School in the United Kingdom, its medical students during last session having amounted to 895 ;

\* \* \* \*

‘That since the present buildings were erected a great and beneficial change has passed over the whole system of medical instruction ; teaching, which was of old exclusively oral, has now become in a great measure practical, the student being required to manipulate, to dissect, and to experiment for himself, under

---

XIV. *Buildings, Libraries, and Museums.*


---

‘ the supervision of his teacher ; for which purpose it is obvious  
‘ that larger space and properly constructed laboratories and  
‘ theatres have become requisite.

\* \* \* \* \*

‘ That other teaching departments of the University besides the  
‘ medical are now placed in a disadvantageous position, a  
‘ laboratory for physical research being needed, and separate class-  
‘ rooms being much wanted for such subjects as Engineering,  
‘ Geology, and Agriculture, in which models or specimens might be  
‘ permanently exhibited.’

The memorial, after pointing out other deficiencies in the present buildings, as the want of a suitable place for holding examinations, of a Hall of Assembly for University ceremonials, and of sufficient accommodation for the Library, goes on to explain that, ‘ to meet the exigencies of the case, it is now proposed to  
‘ move out of the present College buildings the Medical School of  
‘ the University, and those scientific departments which are most  
‘ closely connected with medicine, and to erect for their accommo-  
‘ dation, at a short distance from the present College, and in juxta-  
‘ position to the new Royal Infirmary of Edinburgh, complete  
‘ class-rooms, theatres, laboratories, and museums, constructed on  
‘ the latest principles of scientific teaching. It is calculated that  
‘ this arrangement will be a benefit to the Infirmary as well as to  
‘ the University ; and it will enable the present University build-  
‘ ings to be placed at the disposal of the non-medical departments,  
‘ so as to provide more suitable accommodation for the various and  
‘ constantly increasing professorial chairs ;

‘ That it is proposed also, as part of the new block of buildings  
‘ to be erected, to provide the University of Edinburgh with a  
‘ Hall of Assembly for its academic ceremonials, which hall will  
‘ also be available for the conduct of University examinations.’

To carry out these arrangements, plans and designs by Mr. Robert Anderson had, it is stated, been accepted, the cost of which was estimated as follows :—

|  |                 |          |          |
|--|-----------------|----------|----------|
| Cost of site, with legal expenses, etc., . . .   | £50,000         | 0        | 0        |
| Cost of new buildings for medical and scien-<br>tific class-rooms and University hall, . . .                   | 166,500         | 0        | 0        |
| Cost of fittings therefor, . . . . .   | 15,000          | 0        | 0        |
| Cost of rearrangement and improvement of<br>present University buildings, with some<br>new fittings, . . . . . | 10,000          | 0        | 0        |
| Architect's fee and contingencies, . . . . .   | 20,000          | 0        | 0        |
| Total, . . . . .   | <u>£261,500</u> | <u>0</u> | <u>0</u> |



---

*XIV. Buildings, Libraries, and Museums.*

---

The memorial goes on to state, 'That, to meet the necessary outlay for the purpose in view, about £81,000 are available, which sum is the result, up to the present date, of the voluntary contributions of the community; that the fact of this sum having been subscribed gives evidence of the warm interest taken by the public in the proposals now made; that the University of Edinburgh has no funds which, even with the assistance of public liberality, would enable her to carry out the extensions and improvements which have now become of vital importance to her, as the total revenues of the University from all sources are insufficient, even with strict economy, to do more than meet the necessary annual expenditure; that without State aid it is hopeless to expect that these improvements can be effected within the lifetime of the present generation.'

The memorialists, after urging various further reasons why such aid should be granted, and after quoting the recommendation to that effect of the Royal Commission on Scientific Instruction, conclude with the prayer to the Lords of the Treasury, 'To take the circumstances set forth in this memorial into your favourable consideration, and to propose that Parliament should confer such grants as, with the liberal contributions of the public, may suffice to complete the proposed buildings, and thus enable the University of Edinburgh to continue to perform her part efficiently in the education and scientific progress of the country.'

We recommend that effect should be given to this memorial. The urgent necessity for an extension of the University buildings is not stated more strongly by the memorialists than is warranted by the facts, and, without assistance from Parliament, it will be impossible that the proposed extension should be carried out. The plans and designs which have been selected have been exhibited to us by the architect, and we are satisfied that they have been prepared on a moderate scale, and with a careful regard to economy. It is most desirable that, by means of a Parliamentary grant, the University should be enabled to proceed with the extension as soon as possible.

In the other Universities, apart from the completion of the buildings in Glasgow, which must in our opinion be left to local effort, the requirements in the way of extension which have been brought before us are these:—

In St. Andrews it has been represented to us by both the Principals, and also by other witnesses, that there is urgent need for an extension of the library. Principal Tulloch said (Q. 835): 'We are in urgent need of library extension. We have been before

---

*XIV. Buildings, Libraries, and Museums.*

---

‘ the Government on the subject for at least twelve years, but we  
‘ have not been able as yet to obtain any Government grant for  
‘ the purpose. We have almost made up our minds now to do  
‘ something at our own expense, or partly at our own expense, for  
‘ we still hope to get some assistance.’ Principal Shairp gave  
similar evidence; and Professor Campbell said (Q. 6854): ‘ For  
‘ years the want of extended accommodation has been felt. We  
‘ have no means of arranging our books, or having them put con-  
‘ veniently; and even the space that was allotted at one time—  
‘ viz. the students’ reading-room and place for study—has been  
‘ swallowed up by bookcases, so that the need has become very  
‘ urgent indeed.’

We are satisfied that the necessity for an extension of the library in St. Andrews has not been over-stated by these witnesses. As we have mentioned in explaining the position of the finance of the University, a sum has for some years been set apart from the surplus income of the University to aid in the extension of the building and the preparation of a library catalogue. At the date of the last returns, in 1876–77, the total sum so set apart amounted to £1291, 10s. 9d. It was stated to us, however, by Principal Shairp, that it would take from £8000 to £10,000 to build an adequate addition. We recommend that the University should receive aid from Government for making the extension.

In Aberdeen the accommodation for the dissecting-room attached to the anatomical department is very inadequate, and requires to be extended. This subject was brought before us by Professor Struthers, the Professor of Anatomy, who said in his evidence (Q. 7852\*): ‘ All the departments indeed had [*i.e.* in  
‘ 1863 when he went to Aberdeen] sufficient room, except the  
‘ anatomical, the accommodation for which, I must say, was very  
‘ deficient, and it was found necessary to make additions to it.  
‘ My dissecting-room still remains as I found it, and is adapted for  
‘ about half the number of students I now have working in it  
‘ daily. The enlargement of this room is urgently needed, both  
‘ on the score of working space and on the score of health.’

We have already referred to the great increase which has taken place in the number of medical students attending the University of Aberdeen. This increase makes it urgently necessary, not merely for convenience, but for the health of the students attending the dissecting-room, that larger accommodation should be provided without delay. The charge for the extension must be undertaken by the Government, as the University has no funds for the purpose.

---

XIV. *Buildings, Libraries, and Museums.*

---

We understand, however, that the necessary enlargement may be made at a very moderate expense.

In regard to the libraries of the different Universities, the want of additional funds for their support has been pressed upon us by various witnesses.

In Edinburgh, in consequence mainly of the considerable income derived from matriculation and graduation fees, the University is enabled to afford a larger sum for the library than is given in the other Universities; but even there it is complained that the allowance made is inadequate. Mr. Small, the librarian, explained that £800 a year is the sum allowed by the Senatus for the purchase of books, consisting of £575, the annual payment under the Copyright Act, 6 and 7 Will. iv. cap. 110, in lieu of the privilege of Stationers' Hall, and £225 from the General Fund; and of this allowance of £800 a year, which in Mr. Small's opinion is inadequate, he stated that fifty guineas was now unavailable for purchasing books, that sum having for some years been applied in the form of a subscription to a circulating library in Edinburgh for the loan of books in current literature. It certainly seems undesirable that the allowance for making additions to the library collection should be diminished for the purposes of a payment from which the University derives no permanent benefit. A subscription to a circulating book club is altogether beside the purposes of the library; and on general grounds, it seems a questionable employment of the University funds to provide the members of the University with the means of reading books from a library in town.

In Glasgow, Professor Dickson, the curator of the library, complained much of the inadequacy of the allowances made, and stated that he desired an increase of revenue for the library to the extent of about £500 a year, of which about £300 was in his opinion required in addition to the sum of between £700 and £800 now spent in the purchase of books, and £200 for the purpose of librarians' salaries. As regards this latter head of expenditure, he stated (Q. 2046) that the allowance in Glasgow is at present only £506, as compared with £744 in Edinburgh.

In Aberdeen the compensation grant for the purchase of books under the Act 6 and 7 Will. iv. cap. 110, is considerably smaller than in any of the other Universities, being only £320, as compared with £575 in Edinburgh, £630 in St. Andrews, and £707 in Glasgow. These different allowances were fixed under the Act according to an average of the extent to which each of the Universities had availed itself of the privilege of Stationers' Hall, in lieu of which the grant was given. At the same time, it is

---

*XIV. Buildings, Libraries, and Museums.*

---

regarded in Aberdeen as a grievance that their grant should be relatively so small ; and unquestionably its meagre amount throws an additional burden on the General Fund for the purposes of the library.

It can hardly be expected, perhaps, that an arrangement of compensation grants made forty years ago should now be re-opened ; but we think it very desirable that each of the Scotch Universities should be aided with an annual grant to be expended for the purposes of education generally, and if such a grant were given, the library might be included as a legitimate object of expenditure.

While the small amount of the compensation allowance in Aberdeen makes it necessary to provide a larger sum for the library from the General Fund than would otherwise be required, we do not, as we have stated above, think that the whole unexpended residue of that fund should in every year be devoted by Ordinance to the library, as is at present the case. A discretion in this respect should be left to the University authorities, as in the other Universities.

The Commissioners under the Universities Act made certain general regulations for the management of the University libraries by their Ordinances Nos. 68 and 89. Certain of the details of these regulations have been made the subject of criticism, some persons regarding them as not sufficiently liberal, while by others it is thought that they err rather on the side of liberality. On the whole, we believe that they have been found to work beneficially.

The principal change that has been urged upon us as desirable is, that any member of a General Council should, as a matter of right, be entitled to borrow books from the library of the University nearest his residence, although not the University of which he is a member. At present the Senatus of each University is empowered to grant the use of its library for literary research to all persons who make application, whether connected with the University or not, and we have been assured, as for example by Professor Dickson, the curator of the library in Glasgow (Q. 2056), that ' to those who are prosecuting special researches, the Senate is always willing to give the use of the library, if they state the object which they have in view.' To grant to all the members of the different General Councils the right of borrowing books from the library which might happen to be nearest, would throw a heavy burden on some of the Universities as compared with others ; would probably interfere seriously with the use of the libraries for their

---

*Summary of Recommendations.*

---

primary object, the education of the students; and would entail a considerable additional expenditure in their management and maintenance. This would be the case especially with the libraries of the larger Universities of Edinburgh and Glasgow, near which there are more graduates of the other Universities resident than in the neighbourhood of St. Andrews and Aberdeen; so that the additional burden would be most felt in those Universities where, from the number of the students, the demands on the library are already greatest. It would be inexpedient, in our opinion, to introduce such a change as is suggested. The provision of the Ordinance allowing the use of the library to be granted for the purposes of literary research to any one is sufficiently liberal, and we cannot regard the claim of inter-University privilege, to which we have referred, as one which it would be proper to concede.

On the subject of Museums, we do not think it necessary to enter into any further detail, after the full statement of what we consider necessary for the different classes which we have given under the seventh head of the Report, viz. the Provision of Assistance and Apparatus for any present or future Professors or Lecturers. We would, however, repeat what we have there stated, that while it is highly desirable that teaching collections should be provided and maintained, we do not think that it is expedient that a University should charge itself with the heavy expense involved in forming and keeping up a large general museum.

#### SUMMARY OF RECOMMENDATIONS.

In conclusion, we present a summary of the principal recommendations contained in the body of the Report. We recommend:—

1. That three Assessors shall be elected by the General Council instead of one, as at present, each member of Council having only two votes in the election; that the three Assessors shall be elected together, and shall hold office for the same period of four years; and that, in the event of any casual vacancy in the office of an Assessor, the person elected in his room shall go out of office along with the other Assessors.

2. That two Assessors shall be elected by the *Senatus Academicus* instead of one, as at present; except that in St. Andrews, as long as there are two Principals in the University, each Principal shall be *ex officio* a member of the Court, and while that arrangement exists, there shall be only one Assessor elected by the *Senatus*.

3. That the Assessor nominated by the Chancellor shall hold office for four years, as at present; but that, in the event of a new

---

*Summary of Recommendations.*

---

Chancellor being appointed, the Assessor nominated by the previous Chancellor shall hold office until, and only until, a nomination of Assessor is made by the new Chancellor.

4. That the Assessor nominated by the Rector shall hold office for three years, as at present; but that, when a new Rector is elected, the Assessor nominated by the previous Rector shall hold office until, and only until, a nomination of Assessor is made by the new Rector.

5. That the University Court shall be declared to have the power of initiating proceedings against a Principal or Professor under sec. 12, 5, of the Act 21 and 22 Vict. cap. 83, without the necessity of any one not a member of the Court appearing as prosecutor; and shall be declared entitled, for the purpose of such proceedings, to call before it any member of the University to give evidence, and also to institute and conduct any such inquiries as it may deem necessary for that purpose.

6. That it shall be declared that no decision of the *Senatus Academicus* on a matter within its competency shall be reviewed by the University Court, except on appeal taken by a member of the *Senatus*, or other member of the University having an interest in the decision.

7. That the University Court shall be empowered, on application by any member of the *Senatus*, to define the nature and limits of a Professor's duties under his commission, subject to appeal to Your Majesty in Council, or to the General Universities Court, in the event of a Court of that nature being instituted.

8. That as long as the present arrangement for approval of alterations of Ordinances by Your Majesty in Council subsists, intimation of any proposed alteration shall be given by the University Court proposing it to the other University Courts not less than three weeks before application for its approval by Your Majesty in Council is made; and that evidence of such intimation having been given shall be submitted along with the proposed alteration to Your Majesty in Council.

9. That a General Universities Court for Scotland shall be established, consisting of eleven members,—viz., the Chancellors of the four Universities, four elected representatives of the Universities,—of whom one shall be elected by each *Senatus Academicus*, none of such elected representatives to be members either of the *Senatus Academicus* or of the University Court of any University,—and three persons to be nominated by Your Majesty from time to time; and that the elected representatives of the Universities shall hold office for five years, but shall be eligible for re-election.

---

*Summary of Recommendations.*

---

10. That the General Universities Court shall be authorized and empowered,—

(1) To act as a Court of appeal from the decision of any University Court where the power of appeal is expressly given :

(2) To act as a Court for sanctioning new Ordinances as well as changes in existing Ordinances, as proposed by the University Court of any University to which such new Ordinances or changes are respectively to apply, the separate consent of the Chancellor of the University and the approval by Your Majesty in Council in the form at present required being made no longer necessary :

(3) To take into consideration from time to time, and to report to Your Majesty upon any matters connected with the Universities upon which they may deem it of importance to represent their views, or which may be specially referred to them by Your Majesty.

11. That the necessary expenses of the General Universities Court shall be met from moneys to be voted by Parliament for the purpose.

12. That all persons who have hitherto held, or who shall hereafter hold, the office of Rector, or Principal, or Professor, in any of the Universities, shall be members for life of the General Councils of the Universities in which they have respectively held office.

13. That all students before entering on the curriculum for the degree of M.A. shall be required to pass a 'First Examination' in Latin, Greek, Mathematics, and English, and, when the state of education in the schools renders it practicable, in elementary Physical and Natural Science.

14. That with some modification this examination shall be so adapted as to apply to students intending to graduate in Law, Science, or Medicine,—students in Law having an option of passing an examination in translating from French and German instead of an examination in Greek ; and students in Science or Medicine being examined either in translating from French and German, or in translating from one of these languages and in Greek.

15. That, after passing the 'First Examination,' the candidate for a degree in Arts shall be allowed either to proceed in the present curriculum (exclusive of the junior classes of Latin, Greek, and Mathematics), or to select any one of five lines of study, viz. (1) Literature and Philology ; (2) Philosophy ; (3) Law and History ; (4) Mathematical Science ; and (5) Natural Science.

16. That for graduation in Honours nothing but greater proficiency in the same subjects as are prescribed for the ordinary

---

*Summary of Recommendations.*

---

degree shall be required; and that there shall be only one class of Honours, in which the successful candidates shall be arranged in alphabetical order.

17. That where a student takes his course in Arts at different Scottish Universities, arrangements shall be made enabling him to proceed to a degree in one of them, having regard as far as possible to the rule that the University at which he graduates shall be that in which he has taken the greater part of his course.

18. That every candidate for a degree in Medicine shall, before commencing his professional course, be required to pass the 'First Examination' with the modifications stated in paragraph 14, and shall thereafter devote not less than four years to the course of professional study at present prescribed.

19. That no candidate for a degree in Medicine shall be admitted to examination in Human Anatomy or Physiology, or in any purely medical subject, unless he has passed an examination in Natural Philosophy, Chemistry, Physiology, Botany, and Zoology, as constituting the second and third groups of the fifth or Natural Science department for the degree of M.A.

20. That the final examination for the medical degree shall be confined to the practical subjects of Medicine and Surgery, both systematic and clinical, Obstetrics, Pathology, Therapeutics, Medical Jurisprudence, and Hygiene, and that no candidate shall be admitted to examination in these subjects unless he has passed in the other subjects of the medical curriculum.

21. That the degree of Bachelor of Medicine shall not be granted without a degree in Surgery, the degree to be granted in Surgery along with the Bachelorship of Medicine being that of Bachelor in Surgery (Ch.B.), which has been recognised as a registrable title by the Medical Practitioners Act, 1876; and that the examination fees to be paid by candidates for the double degree shall be twenty guineas (£21), to be paid in instalments at different stages of the candidate's examination.

22. That the degree of Master in Surgery (C.M.) shall be made attainable separately at a future time, under similar conditions to those which now apply to the degree of Doctor of Medicine (M.D.)

23. That in conducting the examinations for the degree of Bachelor of Divinity (B.D.), additional examiners be associated with the Professors in each of the Universities.

24. That while the degree of Bachelor of Arts, or any degree in Arts subordinate to that of M.A., ought not to be instituted,



---

*Summary of Recommendations.*

---

the Universities may grant a certificate in Arts as evidence of a successful completion of a definite part of the curriculum.

25. That for the degree of Bachelor of Science (B.Sc.) every candidate shall be required to pass the 'First Examination,' with the same options as those which apply to candidates for degrees in Medicine; and that, after passing that examination, he shall be required to attend and to pass an examination in either (1) courses in the subjects included in the fourth or Mathematical Science department for the M.A. degree, and also the subjects specified in the second group of the fifth or Natural Science department for the same degree; or (2) the courses specified in any three of the groups of the fifth or Natural Science department.

26. That in the University of Edinburgh, where there is a professorship of Music, honorary degrees in Music may be conferred, but not in present circumstances degrees in Music after examination.

27. That while no entrance examination, a failure to pass which would exclude from the University, ought to be instituted, it shall be a rule of the University that no attendance by a student given before passing the 'First Examination' shall be available for any degree; but that a power of dispensing with this rule in cases where the circumstances may seem to justify the relaxation shall be reserved.

28. That additional remuneration be provided to the Professors and other examiners on whom the duty of conducting the 'First Examination' will devolve, in respect of that additional duty.

29. That in each of the Universities provision for the teaching of French and German shall be made, through the recognition by the University Court of lecturers on these languages.

30. That in the University of St. Andrews, as long as there are two Principals, an arrangement shall be made whereby the Principal of the United College shall give instruction either in English Literature or in History, as he may prefer; and that while discharging that duty he shall be entitled to the ordinary class fees from students.

31. That in the same University the title of the chair of Civil and Natural History shall be altered to that of Natural History.

32. That in the University of Glasgow three new professorships shall be instituted,—viz., a professorship of History, to be a chair in each of the Faculties of Law and Arts; a professorship of Geology and Mineralogy in the Faculty of Arts; and a professorship of Pathological Anatomy in the Faculty of Medicine. That in this University there shall also be instituted three lecture-

---

*Summary of Recommendations.*

---

ships,—viz., one on Public or International Law, one on Civil Law, and one on Mental Diseases.

33. That in the University of Aberdeen four new professorships shall be instituted,—viz., of History in the Faculties of Law and Arts; of Geology and Mineralogy, and of the English Language and Literature, in the Faculty of Arts; and of Pathological Anatomy in the Faculty of Medicine; and that there shall also be instituted a lectureship on Mental Diseases.

34. That in the University of Edinburgh a professorship of History shall be instituted in the Faculty of Arts, in addition to the present chair of History, which shall then be confined to the duties of a chair of Constitutional Law in the Faculty of Law, and the name of which shall be altered accordingly; that the name of the chair of General Pathology in Edinburgh shall be changed to Pathological Anatomy; and that a lectureship on Mental Diseases shall be instituted.

35. That the commission of the Professor of Practical Astronomy in the University of Edinburgh shall express in terms that his tenure of the chair is, as in the case of other Professors, subject to the provisions of the Universities Act of 1858, and shall impose on him the duty of delivering such course or courses of lectures in connection with the subject of his chair as the University Court may from time to time require.

36. That no new professorship shall be founded by any of the Universities until the proposal for its foundation has been reported to, and the proposal sanctioned by, the General Universities Court, if instituted as recommended in paragraph 9.

37. That the following provisions for assistance and apparatus shall be attached to different chairs in the Universities of Edinburgh, Glasgow, and Aberdeen, viz.:

(1) To the chair of Natural Philosophy, a first assistant, with a salary of £250 a year, in addition to the present mechanical assistant at £100:

(2) To the chair of Institutes of Medicine or Physiology, two assistants, one at £150, and the other at £100 a year; also a sum of £1000 for the purchase of apparatus and material of a permanent kind, with an annual sum of £100 for maintenance and provision of new material:

(3) To the professorship of Botany, two assistant demonstrators at £100 each, if the class numbers as many as a hundred,—any additional demonstrators beyond two, if required by the size of the class, being provided by the Professor, and, if the class does not much exceed fifty, one assistant demonstrator being sufficient;

*Summary of Recommendations.*

further, that in Edinburgh the class-room accommodation at the Botanic Garden be so extended as to be suitable for the increased number of students, and for the carrying on of laboratory work; and that in Glasgow the University buildings be extended, so as to provide for the herbarium and for laboratory accommodation:

(4) To the professorship of Natural History (Zoology), two assistant demonstrators at £100 each, on the same conditions, and subject to the same modifications, as specified in regard to the chair of Botany with reference to the size of the class; also £500 for a class museum, and £50 annually for its maintenance:

(5) To the professorship of Geology and Mineralogy, an assistant at a salary of £100; also £250 for a class museum, and £25 annually for its maintenance:

(6) To the professorship of Pathological Anatomy, an assistant at a salary of £100:

(7) To the professorship of the Practice of Physic, an assistant at a salary of £50; and to the Professor or Professors engaged in clinical instruction at the infirmary, a clinical tutor at a like salary; also for the two professorships of Pathological Anatomy and Practice of Physic, an annual sum of £100 for the maintenance of a joint class museum:

(8) To each of the professorships of Surgery and of Clinical Surgery (where such a chair exists), an annual allowance of £50 for the purchase of instruments and mechanism; and for the Professors engaged in clinical instruction in Surgery at the infirmary, a clinical tutor at a salary of £50.

38. That the winter session of the University, in all classes in which no instruction is given in summer, shall be maintained at the full length of six months, and that attendance for any materially shorter period than six months shall not be accepted for any University purpose.

39. That where a course qualifying for graduation is defined as consisting of a certain number of lectures, the University shall not admit as sufficient any course in which lectures of the specified number are not delivered on separate days.

40. That the Court of Curators in Edinburgh be enlarged by the addition of two members, one to be elected by the General Council, and the other the President of the Royal Society of Edinburgh for the time being, *ex officio*; and that, in making appointments to professorships, the votes of those members of the Court alone who are present be admitted.

41. That, for the assistance of patrons in making appointments to vacant chairs, candidates shall be required to furnish to the Uni-

---

*Summary of Recommendations.*

---

versity a statement of their qualifications ; and that it shall be the duty of the Senatus Academicus to present a detailed and reasoned report on their qualifications to the patrons.

42. That an arrangement shall, if practicable, be effected, whereby the patronage of the three professorships in the United College, St. Andrews, now in the hands of private patrons, shall be transferred either to Your Majesty or to the University Court.

43. That the patronage of the professorship of Botany in the University of Edinburgh shall be transferred from the Curators to Your Majesty.

44. That the right of appointment to any lectureships that may be instituted shall belong to the Senatus Academicus.

45. That in the election of Rector in the Universities of Glasgow and Aberdeen, the system of voting by nations shall be abolished ; and that the election be by a general poll of the whole students, as in Edinburgh and St. Andrews.

46. That the time for the election of Rector shall be fixed in each University at a date not later than a fortnight after the commencement of the winter session, and that no election be allowed on any ground to take place at another time than the stated day.

47. That in regard to the election of Chancellor and Assessors by the General Council, the following modifications of the provisions of Ordinance No. 11 of the Commissioners under the Universities Act shall be made, viz. :

(1) The voting - paper shall embody a declaration that the member has not signed any other voting-paper, nor has previously voted in the election, and shall have added to it a clause of attestation to the voter's signature.

(2) No voting-papers shall be delivered personally to members of Council or to any other person, and all shall be issued through the post to the addresses of members as appearing on the register ; and any intimation of change of address, to be in time for the election, shall be lodged with the Registrar before the day of nomination.

(3) While it should be required that the voting-papers shall be issued as far as possible simultaneously, a longer interval than is given by the Ordinance shall be allowed for that purpose, say eight clear days from the day of nomination.

(4) It shall be competent for members to vote personally in the election after the interval for issuing the voting-papers has expired, provided that any member voting personally may be required to declare that he has not signed a voting-paper, nor has previously voted in the election.

---

*Summary of Recommendations.*

---

(5) Provision shall be made that, at the issuing and opening of the letters by the Registrar, as well as at the summing up of the votes, representatives of the candidates may be present.

48. That the mode of election of members of Parliament by the Universities shall be assimilated as nearly as possible to that of Chancellor and Assessor under Ordinance No. 11, as modified in accordance with the recommendations specified under the last head, the form of the voting-paper being so expressed as to embody a declaration that the elector has neither signed any other voting-paper, nor has voted at the election in either of the Universities for which a member is being elected,—the expenses, however, connected with Parliamentary elections not being thrown on the Universities.

49. That, as far as possible, and subject to exception where a Professor's teaching duties are very light, as well as where the Professor properly associates professional practice with the discharge of his academic duties, provision shall be made whereby the emoluments of a Professor shall not be less than £600 a year; the endowment of any Professor, whose emoluments are now less than that sum, being fixed at such an amount as with his estimated probable income from fees may bring up his total emoluments to not less than £600 a year.

50. That the rates of class fees in each of the Universities shall be revised by the University Court, and that the fee in the Faculty of Divinity shall be fixed at £3, 3s., and in the other Faculties shall, where the University Court thinks it expedient, be raised to a higher rate than at present, regard being had to our recommendation as to provision of assistance in large classes; and subject to a declaration that no Professor whose rate of class fee is raised shall have any right to claim compensation for loss of income caused or apprehended from changes either in the rules of graduation or in other University arrangements that may afterwards be effected by the University Court or otherwise.

51. That in each of the Universities of Edinburgh, Glasgow, and Aberdeen, the salary of the Principal shall be increased by £200, so as to raise the salary in each of the two former Universities to £1200, and in Aberdeen to £800 a year; that in St. Andrews the Principal of the United College shall be provided with an official residence; and that the sole Principal of the University, when an arrangement is made for uniting the two Colleges, and in the meantime the senior Principal, shall have a salary of £700 a year.

52. That the conditions of retiring allowances to Principals

---

*Summary of Recommendations.*

---

and Professors retiring on the ground of age or infirmity, shall be revised to the effect,—

(1) Of allowing an addition of fifteen years instead of ten, as at present, to the actual period of service in computing the amount of retiring allowance :

(2) Of allowing a Principal or Professor, at the age of sixty-five, to retire on the retiring allowance applicable to his period of service, without the necessity of his producing a medical certificate of incapacity :

(3) Of reckoning each academical year of service as a year in computing the years of service :

(4) Of allowing years of service in any of the Queen's Colleges in Ireland to be reckoned by a Professor who has held office there previously to becoming a Professor in Scotland.

53. That, in the case of a Principal or Professor proposing to resign his chair without applying for a retiring allowance, intimation of his intention to resign shall be given to the *Senatus Academicus*, who shall transmit the same to the University Court with any observations they may deem necessary in the interests of the University as to the time for receiving the resignation and appointing a successor ; and the University Court, if it accept the resignation, shall intimate the vacancy to the patron.

54. That, in regard to bursaries,—

(1) Bursaries in the hands of public bodies shall be thrown open to competition.

(2) Bursaries, whether in the gift of private persons or of public bodies, under £10 in value, shall be combined so as to form bursaries or scholarships of higher value.

(3) Every person appointed to a presentation bursary shall be required to pass the 'First Examination' for a degree not later than the commencement of his second session of attendance at the University, under the penalty of forfeiture of the bursary in the event of failure ; and in case of such forfeiture, the bursary shall, for the remainder of the time for which he would otherwise have held it, be included among the competition bursaries ; and the same rule shall apply to bursaries restricted to students from particular localities.

(4) The general bursary competition shall be combined with the 'First Examination,' the bursaries being awarded according to the distinction shown by candidates in that examination.

(5) No student who has passed the 'First Examination' shall be again admissible to the general bursary competition open to students entering the University for the first time.

*Summary of Recommendations.*

55. That no sale of land belonging to any University or College shall be carried out by the *Senatus Academicus* without the authority of the University Court having been previously obtained.

56. That the University and Colleges of St. Andrews be united into one corporate body, under the name of the University of St. Andrews, with one administrative body, the *Senatus Academicus*, subject to the statutory control of the University Court, and with one Principal as the ordinary head of the University.

57. That, in the University of Glasgow,—

(1) The charge of maintaining the buildings shall be undertaken by the Board of Works; and

(2) The collection of Hunterian coins and medals shall be sold, and the proceeds applied in liquidation of the debt which has been incurred, and which may still remain due, on the buildings, and, as far as not required for that purpose, in the formation of a 'Hunterian Fund,' to be employed in aiding the various departments of the University in educational work.

58. That in the University of Aberdeen the application of any residue of the General University Fund be not, as now, restricted by Ordinance to the purposes of the library, but be left, as in the other Universities, in the discretion of the University authorities.

59. That in the University of Edinburgh, when the new buildings have been erected, the charge of upholding the whole buildings shall be undertaken by the Board of Works.

60. That, as regards any extension of the different University buildings,—

(1) Means be afforded for enabling the University of Edinburgh to carry out its scheme for providing new buildings for the accommodation of the medical and scientific departments.

(2) A grant be made to aid the University of St. Andrews in extending the library; and

(3) The dissecting-room at Aberdeen be extended to meet the requirements of the medical school.

61. That none of the Universities should charge itself with the heavy expense involved in forming and keeping up a large general museum for public exhibition or use.

It may be useful for us to point out which of these several recommendations require the authority of Parliament to give them effect, and which of them may be carried out by the Universities themselves.

In regard to Nos. 1 to 10 inclusive, and Nos. 12, 31, 36, 40, 41, 42, 43, 45, 46 (in as far as it is proposed that an election of Rector

---

*Summary of Recommendations.*

---

on any other than the stated day shall be incompetent), 48, 54 (partly), 55, 56, and 57 (in as far as regards the sale of the Hunterian collection of coins and medals, and the application of the proceeds), the authority of Parliament will be required.

The recommendations Nos. 13 to 22 inclusive, and Nos. 27, 47, and 58, may be carried through by the University Courts procuring alterations of Ordinances in the manner prescribed by the Act 21 and 22 Vict. cap. 83 ; while to Nos. 23, 24, 25, 26, 29, 30, 38, 39, 50, and 54 (in as far as it does not require legislation) effect may be given by the University authorities without the necessity of a change of Ordinance.

The recommendations Nos. 32, 33, and 34, relating to the institution of new professorships or lectureships, may, it would appear, be carried out by the authority of the Universities themselves ; but, as regards new professorships at all events, it is obviously expedient that none should be instituted until adequate provision for their endowment is made.

With regard to Nos. 11, 28, 37, 49, 51, 52, 57 (1), 59, and 60, the necessary provision which these recommendations involve can only be obtained from moneys to be voted by Parliament.

The adoption of No. 35 rests with Your Majesty.

In regard to the few other recommendations which we have not here specified, it seems unnecessary for us to indicate in what way they may be carried out.

We desire to record an expression of our regret at the loss which the Commission has sustained, during the period of its inquiry, through the deaths of two of its members, Lord Ardmillan and Sir William Stirling-Maxwell.

Lord Ardmillan's death occurred on 7th September 1876, not long after our proceedings under the Commission began. He had formerly been a member of the Commission appointed by the Universities Act of 1858, and had devoted much time and attention to the work of that Commission. He attended our meetings as long as his health permitted ; and had he lived to take part in our final deliberations, his intimate knowledge of Scotch University affairs, and the experience he possessed, would have been of great value. It has been a cause of sincere regret to us that we have been deprived of the benefit of his assistance.

Sir William Stirling-Maxwell had also been a member of the Commission under the Act of 1858, and had taken an active part in its proceedings. He had, besides, been officially connected with three of the Universities, having been Rector of St. Andrews and



---

*Summary of Recommendations.*

---

afterwards of Edinburgh Universities, while at the time of his death he was Chancellor of the University of Glasgow, as well as one of the Curators of the patronage of the University of Edinburgh. His death occurred on 15th January 1878, after the terms of our Report had been substantially agreed to; and as he had attended nearly all the meetings at which its terms were considered, we have the satisfaction of knowing that he concurred in the opinions we have expressed, and in the recommendations of the Report. By his death Scotland has been deprived of a man in the foremost rank of literary culture; and the Universities have lost a generous friend, who spared no pains to promote their prosperity.

All which we humbly submit to Your Majesty's gracious consideration.

JOHN INGLIS.  
BUCCLEUCH AND QUEENSBERRY.  
MONCREIFF.  
LYON PLAYFAIR.  
WILLIAM WATSON.  
J. MUIR.  
J. A. FROUDE.  
A. CAMPBELL SWINTON.  
T. H. HUXLEY.  
JAS. ALEX. CAMPBELL.

ROBERT BERRY, *Secretary.*

*February 1878.*

---

*Entrance Examinations.*

---

## NOTE BY DR. MUIR.

I THINK it necessary to state, that while I concur generally in the recommendations of the Report, and in some points approve of them very cordially, there are some portions of its contents in regard to which, while I find no occasion for dissenting from them, I may not have arrived at any independent or definite judgment. In arriving at the conclusions to which I have come, I have had regard to some portions of the evidence offered to the Commission; but I cannot profess to have weighed all the opinions of our different informants.

I wish further to remark, that I have not attempted to form any opinion on the question whether, in the Arts Faculty, the principles of education hitherto recognised are the most effectual for the culture and discipline of the human faculties; but have proceeded upon the supposition that the systems of education hitherto current and generally approved are either the best, or at least as good as any that have hitherto been devised, without entering on the consideration of any new schemes of instruction. (See, however, Professor Ramsay's evidence, answer 4182.)

The following are the only matters in regard to which I desire to offer any remarks, or to make proposals additional to those of the Report:—

*Entrance Examinations.*

While I concur in the recommendations of the Report (see pp. 43 ff.) in regard (1) to the proposed entrance examinations for students who wish to proceed to the three years' curriculum with a view to the M.A. degree, and (2) to the present retention in the Universities of the junior classes in Latin, Greek, and Mathematics, for the sake of such students as may find a difficulty in obtaining otherwise the elementary instruction necessary to qualify them for passing such an examination, I wish not merely to express my hope that any arrangements which may be made may issue in an elevation of the existing standard of instruction (which is recognised as desirable, in the Report, pp. 18, 46), but further to emphasize the opinion that, as regards the great bulk of the students, they should be regarded as merely temporary and provisional (a result which the Report also (p. 47) seems to regard as eventually in a great measure attainable); and that measures

---

*Entrance Examinations.*

---

should be taken, by means of such external supervision as may be considered most expedient,—by the action of the proposed new General Universities Court, if established,—to ensure that the character of the tuition afforded may be gradually raised to the proper level.

At present, students are admitted into the junior classes who are either ignorant of even the Greek alphabet, or have but a slender knowledge of the grammar and vocabulary of that language. In a properly organized system of education such elementary tuition ought, as far as possible, and as is in fact the case in other countries of Europe where the most efficient instruction is afforded, to be communicated in secondary, or—in exceptional cases, and for the benefit of those who are unable to attend these superior seminaries—in such primary schools as may be so organized as to provide it. It seems to me to be inconsistent with the best modern idea of the character and functions of great and expensive national institutions, dignified with the name of Universities, to communicate—as a rule, and except as a concession in favour of special cases and circumstances—the merest rudiments of linguistic knowledge. And no traditional custom should be allowed to be pleaded in favour of the perpetuation of a system so manifestly mistaken and inconvenient. In connection with this subject, compare the evidence of Professor Blackie, answers 6587 f., Dr. Donaldson, answers 6065 ff., and Professor Ramsay, answers 4248 ff.

One of the first arrangements which it would be necessary to make with a view to the gradual elevation of the standard of instruction, is (at least in the Edinburgh and Glasgow Universities, and in the others if necessary) the transference to well-qualified assistants—who should, however, act under the supervision and direction of the Professors—of the duty of teaching the junior classes during the period of their continuance. By this means the Professor would be freed from the necessity of spending a large portion of his time in drilling students in the elements of Latin and Greek, would be enabled to throw more of his strength into the training of the more advanced students who had passed the examination necessary for admission to the three years' curriculum, and would have more leisure for imparting a still higher knowledge of the classical languages and literature to a select body of students in an upper class, which, as soon as the necessary arrangements can be made, it should be recognised as a part of his duty to open every year, and not—as is the case in the University of Edinburgh at least—only every second year. If

---

*Entrance Examinations.*

---

ever Scottish University education is raised to the standard which it has reached in other countries, the instruction given in those upper classes might come to form the main or the only substance of the Professor's teaching, all tuition lower than this being relegated to the secondary schools or to University assistants.

The preceding remarks and proposals necessarily lead to the further observation, that this desired amelioration of the University system is impracticable without such an increase in the number and improvement in the character of most of our secondary schools (those in Edinburgh and in some other quarters being already highly efficient) as should enable them to send up to the Universities a sufficient supply of students qualified to enter at once on those higher stages of education through which it is the proper function of a University to carry them. (See the evidence of Professor Pauli, answers to questions 4918 f.) Students in those schools, who wished it, might be subjected to a suitable examination on completing their school course (similar to the *abiturienten-examen* of the German schools), conducted by the University Professors and Examiners, or by the school teachers and Government inspectors, such as, when passed and certified, would stamp them as the possessors of a certain standard of culture, and, in the event of their aiming at a University career, entitle them (in the same way as an examination passed at the University) to proceed to study for a degree. I need not say more in explanation of the German system, to which an approximation at least is here recommended, as the subject has been treated with great clearness in Mr. Matthew Arnold's Report to the Schools Inquiry Commission, published in 1868, and subsequently reprinted, with additions, in a small volume in 1874. (See, however, the evidence of Professor Pauli, answers 4892 and 4912, in which he states that he does not think that the German system could be introduced into this country.)

No apprehension need be entertained that, by the introduction of any such arrangements for elevating the standard of instruction in the Arts department, meritorious students from the lower ranks of society—a class which in Scotland has hitherto enjoyed the benefits of University education—would be henceforth shut out from the advantages now open to them. For (1) it is proposed to retain the junior classes so long and to such extent as they may be required; and (2) such students might, if they preferred entering the senior classes, do so at once, without passing any entrance examination (which it is not proposed to require from any but those who are seeking to commence the three years'

*University Faculties of Divinity.*

curriculum with a view to graduation). It is not, indeed, to be desired that the courses of instruction in the senior classes should be adapted to the wants of ill-prepared students. On the contrary, they should be suited to the requirements of such as were well advanced in their studies. But if the ill-prepared students, whose interests it is desired to promote, were—as by the supposition they would be—meritorious young men, perhaps somewhat advanced in age, and eager to learn, they might be expected by assiduous study, aided possibly by extra-mural help, to make rapid progress, and eventually perhaps to raise themselves to the level of the Professor's teaching.\* But the interests of the poorer students should not be allowed to interfere with another interest of such high importance as the elevation of the general standard of education and enlightenment in the middle and higher classes of the community. If the educational system of the country is regulated with a predominating reference to the welfare of the humbler and worse-educated students, the interests of those who have had the opportunities of a good education from their earliest years must suffer from the want of a course of University instruction fitted to take them up at the point to which their excellent school education may have brought them, to carry them on still further, and to expand their attainments into a matured culture.

*University Faculties of Divinity.*

Except in reference to graduation (see pp. 38 and 80 f.), the Report makes no reference to this Faculty. The subject of its modification is indeed one which presents peculiar difficulties. Supposing it to be admitted that divinity is a subject which ought to be taught in the Universities, the ecclesiastical divisions in Scotland, and the growth of a new school of theological thought which questions many of the conclusions of the old systems of divinity and Confessions of Faith, place formidable obstacles in the way of a system of instruction which should on the one hand embrace all the Presbyterian Churches, and on the other hand be in consonance with the requirements of the best modern science.

A proposal which would be at once comprehensive and conciliatory from an ecclesiastical point of view, and which, if adopted and generally approved, would enlarge the field from which competent Professors might be selected, has been made by Professor

\* In cases of this kind the rules ordinarily enforced for graduation might be somewhat relaxed, on proof of a satisfactory standard of excellence being ultimately attained.

---

*University Faculties of Divinity.*

---

Edward Caird of Glasgow. It is, that the Theological Chairs in the Universities should be thrown open to members of all the Churches who would accept the test which is at present required. (See Professor Caird's evidence, answers to questions 9307-9317.) Among the witnesses who express varying opinions on this suggestion, or on kindred questions, I may refer to Professors Crombie (answer 3636), Birrell (4789 ff.), Lewis Campbell (6859 ff.), Lee (7594 towards the end, 7598), Charteris (7629 ff.), Knight (8104), Milligan (10,464 ff.), Dickson (1997 ff.), Rev. Messrs. Alexander (5620), Irvine (9415 ff.), T. Smith (9678 ff.), Principals Tulloch (754 ff.) and Campbell (1002 ff.), and finally Dr. Donaldson (12,070 ff.).

I desire to draw attention to Professor Caird's evidence on the Theological Faculty generally, and to state some of his opinions. He thinks (answer 9307) that it would be an immense calamity if the teaching of theology were removed from the Universities and were entirely given over to the different denominations. This, he considers, would render the Universities anti-theological in a bad sense, and would deprive of their due weight the men who are the natural representatives of religious ideas, if they stood in the position of being the organs of special sects. He regrets that there should be such strict tests for the Divinity Professors, though, if they were freed from all tests, there would be a difficulty as to their getting students to attend them. But he thinks that, if the scheme he suggests were adopted, the Universities would probably, in course of time, absorb all the other (Theological) Halls. Their teachers, so far as connected with the University, would be, to a certain extent, scientific representatives of theology; but if all the Theological Halls should become connected with Churches and not with the Universities, their teachers would have no scientific position, and theology would lose its hold on the country. He thinks or hopes (9308) that the election of Professors from the other Presbyterian bodies would eventually lead to all the halls being combined. His idea in the remarks he has made was to propose steps tending to give the Theological Professors a freer position, as free as they could obtain in the existing state of things. Gradual steps might be taken to liberate the Professors from their limitations. He thinks theology would gain immensely in this country if we had really some independent scientific representatives of it (9316), although, in his answer to question 9317, he says he believes it is in point of fact scientifically taught in the University, but he knows nothing about the details. Supposing no other improvement to be feasible, he thinks it would be desirable to have

---

*University Faculties of Divinity.*

---

a free Chair of Theology unfettered by tests, but that it would be apt to come in the way of the other arrangements (9314).

Professor Caird's proposal, to throw the Theological Chairs open to Presbyterian scholars not of the Established Church, would appear to be recommended by the fact that the doctrines professed by the Presbyterian Churches are so nearly identical; and it seems to be but equitable that, as the Universities are national institutions, all qualified theologians, to whatever Church they may belong, should, without severing their connection with their own Churches, be eligible as Professors in all, or some, of the Divinity Chairs which either now exist, or may hereafter be founded there.

By this means the Universities would be enabled to avail themselves of the learning and talent which may be found in any of these Churches, in so far as these qualifications might be placed at their disposal by their possessors. In the existing state of theological opinion in Scotland it would not be safe to exempt the Professors elected to these chairs from subscribing the Confession of Faith in some form or other. But eventually, as the freer spirit of theological inquiry, which even now exists to a certain extent among the ministers,—especially the younger ones,—both of the Church of Scotland and of the Free and United Presbyterian Churches, becomes, as it may be expected to do, both more decided and more generally diffused, it may become practicable, if not to discard all tests, at least to substitute one which shall allow a much greater latitude to the Professors to express the results to which their researches may lead them, how much soever these may diverge from the hitherto commonly received opinions.

An apprehension, however, exists, that even if the existing Presbyterian tests be maintained, the General Assembly of the Church of Scotland might, in the event of Professors belonging to the Free or United Presbyterian Churches being appointed to Theological Chairs in the Universities, be led to follow the example of the latter Churches, and seek to establish separate Theological Halls for its own students. If such should be the case, and if, further, the Dissenting Churches should not avail themselves of the theological instruction given in the Universities, it is feared that the prelections of the Theological Professors might be attended by few, if any, students, and that this might eventually lead to the abolition of the Divinity Faculties in all the Universities, and to the consequent withdrawal of all national recognition of theology as a science deserving of cultivation,—an eventuality which would be very much to be deplored.

In answer to this it may be observed that, supposing Dissenting

*University Faculties of Divinity.*

Professors to be eligible, they would be nominated not as Dissenters, but for their merits as scholars and thinkers; and that Professors of this class could, in any case, be only very gradually appointed, and would therefore form, at first, only a minority of the Faculties; and that their appointment would consequently be less likely to alarm or offend those members of the Church of Scotland who might be hostile to the measure; while an opportunity would be offered to them for observing its working, which they might then find not to be detrimental.

Another circumstance which may militate against the success of the proposed measure is, the existence of the Theological Halls, which have been for some time established, each with its staff of Professors, by the Free and United Presbyterian Churches, and which have already been to some extent endowed by private benefactors. The United Presbyterian Church has resolved to allow each of its Professors a salary of £700 a year. As the Divinity Chairs in the Universities are not generally so well provided, theologians from the other Churches whose chairs are more valuable would,—unless the University endowments are increased,—naturally, so far as pecuniary grounds are concerned, prefer to accept office, if available, in their own Divinity Halls. But still, in this case, scholars of merit and eminence who had not obtained, or for any reason might not wish to accept, appointments in the Halls of their own Church, might be found desirous of becoming candidates for University Chairs. And even if the non-established Churches should not be disposed, or in a position, to transfer their endowments, in whole or in part, to the Universities, some other means might be found for the better endowment of the latter.

I may mention that the subject just referred to, the eligibility of members of the Presbyterian Churches for Theological Chairs in the Universities, has recently been under discussion in the University Councils of Edinburgh and Glasgow, but has been disapproved of by large majorities.

Even if all the Theological Chairs should not be thrown open, some of them, such as Hebrew and Biblical Criticism, might be so. And there might be two chairs in which Hebrew should be taught,—one in connection with Old Testament Criticism, and another in the Arts Faculty, which might be called the Chair of the Semitic Languages, and in which Semitic Philology generally should form the subject of instruction. (See Professor Birrell's evidence, answer 4759; and compare Professor Tait's answers, Nos. 1218 f.)

A suggestion has been made that, with a view to avoiding



---

*University Faculties of Divinity.*

---

the creation of new Theological Chairs, the necessity for which is affirmed by several of the witnesses, two of the Universities should combine—say Edinburgh with St. Andrews, and Glasgow with Aberdeen—to give a complete course of theological instruction, and that the branches not supplied by the one could be supplied by the other. This plan might, no doubt, render it necessary for some of the present Professors to undertake to teach branches of theological science with which they had not all along been familiar, though they might, perhaps, soon acquire them. This proposal is not undeserving of consideration.

If the idea of throwing open the Theological Chairs in all the Universities to scholars of other denominations should not be adopted (in which case the University Faculties of Theology would continue to be but little attended by any students but such as were preparing for the ministry of the Established Church), another scheme which has occurred to me for effecting the object above stated, *i.e.* for providing thorough instruction in branches of theology not at present, or not sufficiently, represented in the Universities, is (unless, indeed, one Theological Faculty should be considered sufficient for the whole of Scotland, as it possibly might be,—as suggested in Dr. Donaldson's evidence, referred to below), the abolition of the Theological Faculty in two of the Universities, and its retention in two. In this case the Theological Professors in St. Andrews might be transferred to Edinburgh, or *vice versa*, and those of Aberdeen to Glasgow. In this way all the requisite branches of theology might be taught in two of the Universities, and the consequent distribution of work might be undertaken by any Commission which may be appointed to give effect to such of the recommendations of this Commission as may meet with the approval of the Government and of Parliament. Any Professors who might be called upon to undertake duties which they did not desire to enter upon, could continue to receive their salaries, or might be pensioned; and the places of any who might be found superfluous could be abolished when they became vacant.

In the event, however, of the four Theological Faculties being retained, or in any other case—if any offer should be made by private persons to endow new, or to enhance the existing emoluments of existing, Theological Chairs, on condition that the patronage of such chairs should be vested in the Church of Scotland, I should consider it inexpedient that the authorities empowered to accept such endowments should be left free to entrust the patronage to the Church; or, what might perhaps be still more unadvisable, to allow it to remain, at least permanently, in the hands of the donors,

---

*University Faculties of Divinity.*

---

who might nominate persons not possessing the spirit, culture, and scholarship demanded by the present state of theological science.

Supposing that any persons should propose to found and to endow new chairs to afford instruction in any branches of theological science, it should be declared to be within the competence of the University Court, or other authority empowered to accept such foundations, to agree to such proposals, though accompanied with the condition that the holders of such new chairs should be exempted from subscription to any doctrinal test.

A more complete modification of the theological teaching in the Universities than has been recommended by any other witness who has appeared before the Commission, has been proposed by Dr. Donaldson, Rector of the Edinburgh Royal High School, in his evidence given on the 7th December 1877. The following are some of its points :—He desires (ans. 12,071) the greatest possible freedom for the study of theology, which is a science, and the results of which are likely to be the more valuable the less it is fettered. This end can be best secured by making it a science within the Universities uncontrolled by any authority outside, this Faculty being subject only to the University Courts (which would appoint the Professors) (ans. 12,079), and exempt from any interference on the part of the Church, which has a tendency to check free inquiry or to lead to the suppression of its results. He has found (ans. 12,072) that there is a large number of men in Scotland who are well able to deal with theological questions, but they have no sphere in which to work ; and, in a number of cases, men who may be otherwise sound, are deterred from investigation and from the publication of its results by an apprehension of the repressive action of the Church, and this to the great detriment of our theological literature. He considers that the Theological Faculty should be quite unrestricted in regard to the tenets taught, except by the University Courts, which, he supposes, would have to legislate on the subject. This body, he thinks, would feel the pulse of the nation (in regard, he means, no doubt, to theological questions) better than an ecclesiastical assembly could do. He would not say that the Professors of Theology should be absolutely unrestricted, as this might be prejudicial to the interests of the University (ans. 12,098). He does not think the Churches would refuse to recognise the teaching of the University Professors, but could not say—would not like to judge (ans. 12,079). In reply to another question, he states his opinion, that if the University Court exercised its power judiciously, the Church might have confidence in its action (12,100). He does not doubt that (in the

. .

*University Faculties of Divinity.*

circumstances contemplated) the first election by the University Court would be a very safe one (12,104). He thinks the difficulty in regard to the Churches could be removed to a certain extent by empowering them to appoint in the Universities Professors of their own, who should teach their special students the doctrines of their own Church. Dr. Donaldson remarks (12,074) that, in a great many of the departments of the Theological Faculty, it is a matter of comparative indifference what the teacher himself believes; and he instances Hebrew and the doctrines of the Old, and even of the New, Testament Scriptures, on which an honest man would give the fairest information.

Being asked (12,105) whether, in the event of this scheme he proposed not being carried into effect for some time, he would approve of teachers being licensed by the Universities, and allowed to teach unrestricted by tests, he replied that he would sanction any plan which would help forward the truth, and considers that the more a University embraces within itself real investigators the better. But he observes that this proposal does not harmonize well with our present system.

In his answers (12,080 and 12,095) Dr. Donaldson gives some hints for a scheme of theological study, and mentions a number of chairs which he considers necessary. He thinks one Theological Hall might suffice, or nearly so, for the whole of Scotland (12,083, 12,096, 12,097).

In his answers to Nos. 12,090 and 12,081, he states his opinion, that unless students are thoroughly instructed in Latin, Greek, and Hebrew at school (*i.e.* before coming to the University), they should be required to continue these studies during the whole of their theological course, so as to maintain their acquaintance with them.

I desire to give prominence to the suggestions of this able and enlightened scholar, although without much hope of their early adoption. For although the immediate, or even the speedy, realization of the best ideals is not often to be expected, it is always expedient to place them on record, in the assurance that such publication must lead to their more general appreciation, and in the end may bring about, in some form or other, the substantial accomplishment of the objects at which they aim.

But whatever measures may be adopted in reference to the professorships in the Faculty of Divinity, I would venture strongly to recommend, with a view to the advancement of theological science,—which, as is evident from its history, has gone through various phases and various stages of improvement, and which may therefore be expected to attain a still further development in the

*Creation of a Learned Class in Scotland.*

future ; and in consideration of the fact that some of even its most important, as well as indubitable, results have not yet been generally accepted,—I would, I say, recommend that facilities should be afforded to all students or other persons who may desire to do so, to make themselves acquainted with the best results of Biblical Criticism, Church History, and Theological Speculation, as these may be expounded by independent thinkers ; and that with this view the University authorities should be empowered to authorize scholars who may appear to be competent expositors of any of the branches of Theological Science above referred to, to lecture on these subjects within the walls of the University without being required to subscribe any Confession of Faith.

Permission might also be granted to any competent scholar to give lectures on the History and Science of Religions. I may mention that a Professor has recently been appointed in the Theological Faculty of the University of Leyden, in Holland, to give instruction in this subject under the appellation of 'The History of Religions in General.'

It may be mentioned that the Theological Faculties in the Universities of Holland have under recent arrangements been entirely released from any connection with the Reformed Church, and that in their teaching the professors need not now to be influenced by any other than scientific considerations.

*Creation of a Learned Class in Scotland.*

I trust that the recommendation in the sixth section of the Report, p. 67 at the foot, that the University authorities may be empowered to recognise or appoint lecturers in any of the Faculties, on subjects which may not be at all, or but inadequately, represented in the University, will, if carried out, have some effect in raising up that learned class, which at present is very much wanted in Scotland, and which, if it existed, might be expected to lead to the more thorough cultivation of all the branches of learning, and would supply a choice of qualified candidates for the various professorial chairs. But in order to make such a measure really effectual for the object last specified, it would be necessary to allow such lecturers to handle any of the subjects treated by the Professors, and not to confine them to such subjects as might be imperfectly represented. Among others, and especially in those Universities where no provision exists for teaching Comparative Philology, competent young scholars might be licensed as lecturers, to give instruction in that science in connection with the Sanskrit language and literature. I have already suggested that, in the

*The Test at present exacted from Lay Professors.*

same manner, theological lecturers might be recognised. But such recognition of intra-mural lecturers in the Universities would be of itself insufficient to call into existence so large a learned class as is desiderated. For the full accomplishment of this purpose, it will be necessary that the teachers in secondary schools should be much better remunerated than they are at present.

*The Test at present exacted from Lay Professors.*

A recommendation that this test should cease to be exacted is made by a part of the Commissioners. See the Report, section x. p. 90. In this I heartily concur.

By the existing Act, 16 and 17 Vict. cap. 89, Professors not in the Theological Faculty are required to make a declaration in these terms: 'I, A. B., do solemnly and sincerely, in the presence of God, profess, testify, and declare that, as Professor of \_\_\_\_\_, and in the discharge of the said office, I will never endeavour, directly or indirectly, to teach or inculcate any opinions opposed to the divine authority of the Holy Scriptures, or to the Westminster Confession of Faith, as ratified by law in the year one thousand six hundred and ninety, and that I will not exercise the functions of the said office to the prejudice or subversion of the Church of Scotland as by law established, or the doctrines and privileges thereof.'

It is of manifest importance that the Professors should be exempted from any declaration which may tend to hinder them from expressing freely any conclusions arrived at by modern science, but which may be really or apparently in conflict with the doctrines of the Westminster Confession of Faith, or with the statements of the Scriptures themselves.

I understand that no such test has to be subscribed in reference to the thirty-nine articles of the Church of England by any of the lay professors in either of the Universities of Oxford or Cambridge. This can easily be ascertained. There seems to be no good reason why what is not required in England should be exacted in Scotland.

J. MUIR.

SUGGESTIONS FOR THE LAW AND HISTORY  
SCHOOL BY MR. FROUDE.

The place of history in a University curriculum is more difficult to define than that of any other subject. A student is imperfectly educated if he is left at the end of his course with no knowledge at all of the past condition of his own and other countries, yet the enormous range of the field makes the problem of dealing with it almost desperate.

In the honour schools at Oxford forty years ago, the examinations were limited to extremely interesting, but also extremely limited, periods of Greek and Roman history. These periods were studied to their minutest details. An exact acquaintance was required with the language and contents of four or five remarkable books. These books were indelibly printed on our memories; but a man, nevertheless, might leave Oxford with the highest honours who had never heard of the Constitutions of Clarendon, who could not have dated the Union of Great Britain within a century, or have more than vaguely distinguished between William the Conqueror and William of Orange. The University purposely abstained from teaching modern history, political and religious partisanship being supposed to make impossible an impartial and scientific treatment of it. The London University has gone to the exactly opposite extreme. A student going up for a Pass degree there is expected, in addition to a dozen other subjects, to have a general acquaintance with the doings of the whole of mankind from the beginning of recorded time. Oxford has been carried forward less violently, but in the same direction, since 1852, and a new school has been founded, where separate honours are given in Law and History. But the system is as yet tentative. It enables idle, clever men to obtain with cramming the appearance of distinctions to which they are not entitled, and thus we are encountered at the outset with two difficulties. If the range of study is narrowed to specific groups of incidents, the student may remain absolutely ignorant of subjects of the utmost importance to

---

*Suggestions for Law and History School.*

---

him; while, on the other hand, long catalogues of dates and events are not knowledge, but only landmarks on the chart of knowledge. Such brief records no more convey a true idea of the circumstances to which they refer, than a name upon a map conveys an idea of any spot upon the actual globe.

The dilemma is evaded by bold endeavours to group masses of human phenomena under general laws. We feel instinctively that man being part of nature is no exception to the order of nature, and that his actions, if thoroughly known, will be found to arrange themselves in a sequence of cause and effect. We have national histories, constitutional histories, histories of commonwealths and religions, scientific histories, philosophical histories,—attempts, all of them, to systematize human development, and to represent individuals as merely the instruments of deeper and broader forces. Many of these theories are curious, and some are valuable. Yet so far they are scarcely more than guess-work, and are no more true to fact than the didactic novel written to enforce a moral is true to personal experience. Human life does not illustrate one moral, but many morals; and the truer the representation of it, the more complex is the impression left upon the mind. Ingenious speculators assume principles which seem to interpret the phenomena of History, but as yet there is no agreement among them on the most elementary propositions. The ablest thinkers are not yet satisfied whether human progress is moral or intellectual, or both. They are at variance even on the simplest laws of evidence, and accept facts or reject them according to their antecedent notions of historic probability.

All philosophies of history which have been hitherto suggested are inadequate and misleading as educational guides. As with the life of any single individual, the more exact our knowledge of it, the more difficult we find it to sum up our conclusions in compendious propositions; so when we examine closely any critical epoch of history, we find our philosophy at fault on a thousand points, and the instruction which we draw from real knowledge of mankind resembles rather the instruction which we gather from the *Iliad* or from *Hamlet* than scientific conclusions resting on intelligible premises. Thus the problem remains where it was. For the purposes of teaching, History cannot yet be treated scientifically. For the present we must be contented with a map of the great outlines, as perfect as it can be made; and that the student may know what the words which he commits to memory may represent,

---

*Suggestions for Law and History School.*

---

he must be brought in close contact, at special points, with the reality itself. So far History is only useful for its general effect upon the intellect. It does not, like Science, yield definite discoveries which thenceforward are the property of all men; it rather strengthens the mind itself by extending its horizon. It lifts men above their narrow interests and limited range of experience; it extends their sympathies and broadens the base of their judgments, and for such a purpose the student must become as closely acquainted with other times as he is with his own. He must know the men of whom he reads, as if he saw them with his eyes. He must understand their surroundings; he must comprehend their motives; he must throw himself into their moods and passions. Thus, gradually, History will have a real meaning to him, and, having acquired the key to it in particular instances, he can then take his map for himself and examine wherever he pleases.

Therefore, as it seems to me, the method of a school of History should be this. A general chart of universal history should first be laid down. Then a chart on a larger scale of the history of the country to which the student belongs. His own country is nearest to him; he knows the localities of it; he is what he is, because he inherits his character from his forefathers, and their actions and fortunes will touch him more nearly than those of others. Lastly, the Professors should choose particular epochs on which they should specially lecture and specially examine. In Scotch Universities those epochs should be chosen from the history of Scotland. No nation in Europe can look with a more just pride on their past than the Scots, and no young Scotchman ought to grow up ignorant of what that past has been.

The Professor, too, should direct the student always to original authorities. He must not let them content themselves with the ablest modern writers. Through contemporary writings only he can be introduced into the inner life of passion and conviction, where the interest and the instructiveness really lie.

It may be objected that trustworthy contemporary writings are not to be found except at intervals. For our knowledge of Scotland, as of most other European countries in early times, we depend chiefly on monks and poets, who are neither of them particularly reliable. But they are not our entire dependence. In the statutes of the Scottish Parliament we have a record of another kind growing steadily, generation after generation, in which the evolution of the national life can be distinctly traced,—a sort of bony skeleton upon



*Suggestions for Law and History School.*

which flesh and blood and colour can be laid on from other authorities, with a certainty that the true proportions are still preserved. The Law and History schools are combined. The two subjects can be carried on together and will mutually illustrate one another. Let the Professor select his period, and indicate the laws then passed which are specially to be observed. The student should learn the circumstances of the time. He should notice the names of the peers and prelates who attend the particular Parliament, and should be prepared to give an account of them. Knowledge of these matters he can obtain from modern books; but the laws themselves he should study in the original language in which they were written, the mediæval Latin, the rare and occasional Norman-French, or the Scotch, which gradually supplanted both. The mere ability to construe accurately a Latin or Norman-French statute would imply acquirements of a real and valuable kind, and the process would be found to answer the same purpose which the dissection of a plant answers with the naturalist.

Let me illustrate what I mean:—

From the *Leges Quatuor Burgorum* a complete picture can be drawn of the commercial and municipal condition of the old towns in Scotland. In the *Regiam Majestatem* we find the general social constitution and the gradual intrusion of Norman ideas. The French laws of Queen Margaret show the Norman influence growing stronger. The conquest by Edward the First follows. The Government, as represented by Edward's legislation, is now Norman completely; and a scheme is drawn for the representation of Scotland in the English Parliament. Then follows the great national uprising, and among the documents in the Statute Book relating to it there is one so characteristic, so signally honourable to Scotland, that every Scottish student ought to be familiar with it. Bruce had driven the English out; another invasion was threatened, under the countenance of the Holy See; and the lords of Scotland—Campbells, Keiths, St. Clairs, Grahams, Setons, Olifants—sent their remonstrance to the Pope.

It commences with a short sketch of their past history, valueless in itself, but valuable as showing what the Scots then thought about their origin. It tells how they had come from Scythia along the Mediterranean into Spain; how from Spain they had passed into the British Isles, and had settled themselves in the Northern wilderness,—the point of the story being, that in all their changes they had remained a free people. In their new

---

*Suggestions for Law and History School.*

---

home they had been attacked again and again by the Norwegians, the English, and the Danes, but had never been subdued. They had been converted to Christianity at first hand by Christ and St. Andrew, owing not so much as their religion to any foreign power. Of late, at a time when they were left without a lawful sovereign, England had taken them at advantage, and had overrun the country, wasting, burning, and killing, sparing neither age nor sex. They had made Robert Bruce their king; they had risen against the English, and had driven them out; they were again free, and with God's help so they would remain. Then follow these remarkable words:

'To King Robert we now adhere. If he betray us and sell our liberty, we will expel him and choose another. While a hundred of us remain alive, we will never submit to England. We do not fight for glory; we do not fight for wealth: we fight for freedom, and we will lose it only with our lives. Therefore, Holy Father, in His name whose authority you bear, respect not persons—judge not with an unrighteous balance. England once sufficed for seven kingdoms and more. Bid the English king be content with his own, and leave us alone in our barren land. Or if you refuse to hear us, if you continue to favour the English, we charge on you at the throne of the Most High all the miseries which they will inflict on us and we on them.'

Set by the side of this address an ancient statute scarcely less instructive, and you have the two fountains out of which Scottish nationality has evolved itself:

'It is ordained that all barons and freeholders that are of substance put their eldest sons and heirs to the schools fra they be eight or nine years of age, and to remain at the Grammar Schools till they are competently founded, and have perfect Latin; and thereafter to remain three years at the Schools of Art and Law, so that they may have knowledge and understanding of the law, through which justice may reign universally through all the realm.'

Similarly in the Statute Book can be traced with authentic clearness the relation of the laity with the clergy, and of both with the See of Rome, the alternating ascendancy of the two parties in the State, and the approach, through a century and a half of struggle, of the revolution of the sixteenth century. In the same spirit in which it resisted England, Scotland equally contended against the Popes, and continued long to be exempted by a special

---

*Suggestions for Law and History School.*

---

Bull from interference in the nomination of its bishops. James the First, frightened by Lollardism, began a counter legislation for orthodoxy and the Pope's authority. Under James the Third and James the Fourth, the free tendencies reasserted themselves. Privilege of clergy was restricted; the Pope's friends were threatened with prosecution for treason, and church property was confiscated in support of colleges and schools. Appeals to Rome were practically forbidden. A suit pending before the Pope, between the Archbishops of St. Andrews and Glasgow, was revoked by order of Parliament to be settled within the realm; and an order was issued that all outstanding appeals to the Papal Courts should be dropped.

The shock to prejudice and tradition created throughout Europe by Luther's movement restored the authority of the bishops and abbots in Scotland. Luther's writings were interdicted, and 'no person was allowed to dispute or rehearse Luther's 'opinions, except to the confusion thereof.' The bishops' 'curings,' which had become ridiculous, were made into realities by the secular arm. National antipathies came to the bishops' help, and, as England fell from the Pope, Scotland drew closer to him. In 1522 Parliament repealed all the laws which had been passed in restraint of his usurpations; and an innovation was made in the constitution by the institution of a College of Justice, superseding the ordinary Courts, which was under spiritual control. In 1540 the Statute Book shows the establishment of an Episcopal inquisition almost identical in form with the inquisition set up by Charles the Fifth in the Netherlands. The Parliament invoked the intercession of the Virgin for the extinction of heresy in Europe. It was made death to dispute the Pope's supremacy, and it was heresy (with the stake behind it) to discuss the meaning of Holy Scripture in public or private. To conceal a heretic was as much a crime as to be a heretic. No person once suspected was admissible thenceforward to any office of trust; and heretics were tempted to betray one another by promise of pardon and reward out of the effects of the accused. . . . Session after session the drama unfolds itself. Solway Moss and the death of James the Fifth shake the bishops' power. Lord Maxwell carries a law against them permitting the Queen's lieges to have 'a good and true translation of 'the Bible in the vulgar tongue;' and the Act is proclaimed at the market cross at Edinburgh. The bishops return to power the next year, and Cardinal Beaton is made Chancellor. The College

---

*Suggestions for Law and History School.*

---

of Justice is re-established. The inquisition becomes active, heretics are burnt, and then Beaton is murdered in the Castle of St. Andrews. Following this the Statute Book shows a coalition of parties with a result peculiarly curious. Laws are passed confirming the bishops' 'cursings.' Kirkmen are exempted from penalties for non-payment of taxes. 'Insolent and evil persons' 'eating flesh in Lent, not regarding the law of God,' are to be punished with confiscation and imprisonment. The Reformers, on the other hand, carried laws against 'profane swearing,' as 'bringing God's wrath upon the people' (the bishops being especially mentioned among the offenders); against disturbers of what was now called 'Divine Service;' and against 'incorrigible adulterers.' The ancient village customs, 'Robin Hood and Little John,' 'The Abbot of Unreason,' and 'The Queen of the May,' were abolished; and women who went 'singing under summer trees' were to be taken 'and set upon the cukstules.' The revolution follows in 1560, and the new era is inaugurated with 'The Declaration of Faith.'

These are a few examples of the use which may be made of the Statute Book. The story of the times which follow is told there even more completely. The adventures of Queen Mary, the accession of James the Sixth, the growth of the Kirk, the struggles between the Crown and the new spiritual authority which succeeded the Catholic Church, the Union of the Crowns, the fierce battle which Scotland had to fight for its freedom, the final Union of the kingdoms,—all can be traced in the same pages. The history of these events, as there written or implied, controls the narrative of partisans, and exhibits in authentic force, with an authority continuously contemporary, the motives and passions which influenced opposing factions. Historians from the nature of things describe things from their own point of view. They distribute the lights and shadows according to their preconceptions. The result may be an interesting book, but it contains not the truth, but the truth as it represents itself to the historian's mind. In the Statute Book, so far as it goes, we have the minds of the actors themselves, and that is the nearest approach to reality attainable in historical studies.

My proposal is this, then,—that for honours in Law and History, the student, in addition to his general course, shall be examined in particular periods of Scottish history, to be selected by the Professors; that extracts from the Statute Book, in the

---

*Suggestions for Law and History School.*

---

original language, bearing on these periods, shall form a text-book which he will be expected to have mastered ; that, with respect to each law, he shall make himself acquainted with the circumstances under which, and the persons by whom, it was passed, the Professors indicating the authorities to be consulted, and lecturing on the subject where it is of special importance.

J. A. FROUDE.

## INDEX OF EVIDENCE.

---

**ALEXANDER, REV. WILLIAM LINDSAY, D.D.**—Has been assessor for General Council in Edinburgh University for five years, and has regularly attended meetings of University Court, 5546-5549.

**Constitution of University Courts.**—Thinks no change desirable, except that Council might have an additional assessor; proposed method of election, 5550, 5551, 5556-5561.

**Powers of University Court.**—Court should have election of tutors or assistants to professors, 5562-5573.

**Regulations for graduation in Arts.**—Would permit to graduates alternative courses and subjects of examination, believing that it is unwise to make all students pass through same course of examination; reasons adduced, 5574-5577, 5589.

**Expedient to reinstitute Bachelor-ship of Arts.**—Attendance and requirements which ought to be expected from candidates for this degree, 5578-5582; does not think higher degree in Arts would suffer by introduction of B.A. degree, 5590-5592; advantages expected from introduction of B.A. degree, and class who would be most benefited, 5583-5586; would not make B.A.'s members of General Council, 5587, 5588.

**Expediency of instituting entrance examinations.**—Is of opinion that this is not desirable at present, 5593-5601.

**Prolongation of session.**—Thinks, if it could be accomplished, would be very desirable; would propose a summer and winter session, divided into three terms of three months in the year; effects of such a change, and possible objections to same discussed, 5602-5615.

**New professorships in Edinburgh.**—Would transfer professorship of Oriental Languages to Faculty of Arts, by taking Hebrew from Theo-

logical Faculty, and requiring professor to teach Arabic as well as Hebrew, 5616, 5617; in Theological Faculty there should be a Professor of Old Testament Exegesis, 5618-5620; Faculty of Arts, a Professor of Teutonic Languages, including Dutch, desirable, 5621.

**Assistants to professors.**—Would prefer a system of tutors, under superintendence of professors, for junior classes, to present arrangement, 5623-5628, 5633; effect of this plan in German Universities, 5629-5632; provision for remuneration of tutors, 5634.

**Extra-mural teaching.**—Would not introduce into Faculty of Arts; reasons for objecting to proposal discussed, 5636-5639.

**New foundations, fellowships, and scholarships, if created, might be used in providing tutors, 5640-5642.**

**ALMOND, HELY H., Loretto School.**—Is head-master of Loretto School at Musselburgh, and a member of the Business Committee of the General Council of the University of Glasgow; is not a graduate, but was a Snell exhibitioner from University of Glasgow to Oxford, 10,503-10,508.

**Regulations for graduation in Arts.**—Considers that Glasgow and Edinburgh courses for Arts are already too diffuse, and tend to prevent graduation; more subjects are required for a pass degree than at the English Universities; proposes as remedy that Natural Philosophy and English Literature should not be compulsory, but that alternative subjects should be given; would make Latin, Greek, Elementary Mathematics, and the Moral Sciences compulsory; and for alternatives, for instance, such subjects as a period of History, either ancient or modern, or Natural Philosophy; it would be well

that alternative subjects should differ in different Universities, as Oxford and Cambridge differ, 10,508-10,518.

For degrees in honours, would admit a man with fewer subjects if certain entrance examinations were introduced; nature of such examinations at Oxford and Cambridge described, 10,514-10,518; anxious to see in regulations for pass examinations the exclusion of 'cram' subjects; part of a Glasgow examination for M.A. read, to show class of questions objected to; further specimens from Indian Civil Service examination papers; coincidence in this opinion by Messrs. Harvey and Sellar in their Report on Scotch Schools, 10,519-10,523; strongest objection to proposal to make Greek an optional subject, 10,523-10,525.

Institution of entrance examinations.—Thinks that for younger students entrance examinations are most desirable, but would be disposed to exempt certain men, say, above 19 years of age; reasons for this opinion discussed, 10,526-10,531.

Classes at present flooded with ignorant boys; one reason, low condition of secondary education, and another, the effect of the Education Code in destroying real culture in primary schools; if, say, five years' notice were given of intention to establish an entrance examination, both classes of schools would be stimulated to improvement in meantime, 10,532-10,535.

Suggestion that a portion of the large endowments in Scotland, shown to exist by the Endowed Schools Commission, might be applied to supplement fees for higher education in primary schools, 10,536, 10,537.

German University system.—Effect of German *abiturienten* examination upon culture of students; but same standard could not be introduced here, 10,538-10,540.

New professorships or lectureships required.—Thinks a professorship of Hygiene much to be desired; study might at first be voluntary, but would wish it to be made compulsory on schoolmasters, 10,541-10,545.

Assistance to professors.—Classical professors in Glasgow require more assistance, 10,546-10,548.

Length of University sessions.—Long enough for both professors and students, 10,549.

Extra-mural teaching.—Objects to its recognition, on ground that it might lead to cramming on part of extra-mural teachers, and probably ultimately on the part of the professor, 10,551, 10,552.

Mode of appointment to bursaries.—Presentation bursaries have been productive of many evil effects; some evils might be met by obliging presentees at once to pass an examination of a good standard, 10,553-10,557.

ANDERSON, PROFESSOR M'CALL, Glasgow.

—Is M.D. of Glasgow University, and Professor of Clinical Medicine there; chair instituted in 1874, and witness is the first professor, 9890-9894.

Salary of chair is about £100 a year; in 1875 the fees amounted to, in winter session, £105, while the summer session yielded only 15s. 9d.; reasons for the latter discrepancy as compared with winter session, 9895, 9896, 9896-9994.

Peculiarity in Glasgow as to way in which fees of Clinical professors are paid.—Glasgow Royal Infirmary charge students £21 for a perpetual fee, entitling students to attendance at hospital for life; of this sum, £7 is retained by the infirmary, and £14 is given to the lecturers; the latter are all extra-mural; payment of professors is entirely optional to the infirmary; the New Western Infirmary, from its vicinity to University, now practically furnishes all the Clinical teaching; here, however, the infirmary retains £10, 10s. out of the £21 of fees, so that the professors are worse paid than by the Glasgow Infirmary; better arrangement would be, a certain fee to be charged by professor, and separate payment by student to infirmary, 9897-9917, 9947-9950.

New professorships or lectureships.—In favour of Professors of Clinical Medicine and Clinical Surgery in all Scotch Universities; these should be taught separately by different persons from those who teach the same branches theoretically, 9918, 9919.

Difficulty in stating what salary would be required for these chairs; thinks that salaries at present received by most of the professors in Medical Faculty are far too small, and very great inequality in the emoluments of the different chairs exists; instances

quoted, and proposal for cure of this evil, 9920-9940.

Fees payable by students.—If any increase, would require to be done very cautiously, 9941-9946.

Medical education more expensive now than fifty years ago, owing to subjects being increased, 9947-9953.

Assistance and apparatus for professors, etc.—Assistance and apparatus in Medical Faculty very inadequate; chairs instanced, 9954-9960, 9979, 9980; number of students witness has under instruction in infirmary at one time, and effect of infirmary regulations in varying the number explained, 9961-9972.

Extra-mural teachers.—Glasgow University has latterly been recognising nearly all extra-mural teachers who apply in the regular way, 9978-9978.

Calls attention to the fact that professors in Glasgow are allowed to give qualifying tickets on other subjects than their own, and in competition with their colleagues, 9982-9984, 11,551.

Exception in favour of present Professors of Medicine and Surgery, 9995-10,002.

*Re-examined.*—Wishes to withdraw statement at close of former evidence—allowing Professors of Systematic Medicine and Surgery to compete with Clinical professors, by giving courses on their subjects, and further reasons for this opinion, 11,542-11,549, 11,551, 11,559-11,571.

Lectures of six extra-academical teachers may qualify, and already compete with witness' chair, 11,550.

Objects to practice of Glasgow, that lectures of one extra-mural teacher may be accepted as qualifying for two departments, 11,552-11,558.

**BAIN, PROFESSOR.**—Has been Professor of Logic in University of Aberdeen and teacher of class of English Composition and Rhetoric since 1860, 5346-5349.

University Court.—Has never been a member, 5350; would suggest that it would be better if the Chancellor did not possess a veto, 5351-5353; has to suggest, in regard to future Ordinances, that, in the case of identical regulations, they should be issued as special Ordinances for each University, 5355; in case of a University altering a special Ordinance, other Universities objecting should

have power of appeal to Privy Council, 5356, 5357; reasons for these opinions discussed, 5358-5362.

Faculty of Arts regulations for course of study.—M.A. degree.—Propriety of alternative between Greek and German as one of the subjects of study for M.A. degree discussed, 5365, 5371-5375, 5378; holds that present curriculum should not be maintained rigidly as the only one to carry M.A. degree, 5363; objects to an inferior degree under title of B.A. or B.Sc. being created, 5363-5370, 5376, 5377.

Entrance examinations.—Believes that influence of bursary competition has raised the standard higher than a mere pass examination would do, 5379-5387.

New professorships.—Suggests a lectureship in German Literature, assuming students to come up grounded in grammar and reading, 5388-5391.

Assistance in English class of Faculty of Arts required, 5394, 5395.

Alteration of sessions of University.—None required, 5396-5400.

Appointment of University officers.—Would coincide with a modification of patronage to extent of that obtaining in University College, London, where the Council, which has the patronage, receives a full report from the Senate upon the merits of candidates, 5401-5410.

Professors' salaries and retiring allowances.—Desirable that professors should be allowed to retire at sixty, without a certificate of disability; also that the Court should have power to require a professor to retire on no other ground, if it saw fit, 5411.

Appointment to bursaries.—Bursaries are given by competition as far as possible, 5412.

Financial position of University.—Effect of optional system in classes for Faculty of Arts, and alternative proposals for regulating emoluments of professors, 5413-5415.

Bursaries and scholarships.—Proposal to divert reserved Bursary Fund to general benefit of University, and plan of distribution, 5416-5420.

**BALFOUR, PROFESSOR.**—Has been Professor of Botany in University of Edinburgh, under appointment by the Town Council, since 1845; was also appointed that year as Regius Pro-



essor of Botany and Keeper of the Botanic Garden; last Universities Commission took away salary from Regius Keeper to add it to salary of Professor of Botany, 7352, 7353; importance urged of having offices of Regius Keeper and Professor of Botany put under Crown, and appointment to be held by one person, 7354; would suggest that some of the curators might be appointed by General Council, 7355, 7356; curators should hand over patronage of University chair to the Crown, receiving other patronage in exchange, 7358-7360.

Graduation in Medicine.—Table of number of matriculated students in Medicine and Surgery from 1860-61 to 1875-76 (both inclusive), 7357.

Institution of new faculties or degrees.—Of opinion that a Faculty of Science should be instituted, apart from Faculty of Arts, confined to the Natural and Physical Sciences, including the degrees of D.Sc. and B.Sc., 7361-7366.

New professorships.—Suggests propriety of establishing a chair of Medical Psychology, distinct from the professorship of the Practice of Physic, and a Clinical professor, with examinations in wards of the infirmary, 7367-7369.

Submits to Commission necessity for increased apparatus for laboratory work, and for enlargement of class-room in Botanic Gardens, where classes are taught; increase in this respect rests with H.M. Board of Works, not with University, 7370-7376.

Extra-mural teaching.—Approval of, to the extent that a student may take four classes out of it, 7377.

New degrees.—Considers that among the Medical degrees the C.M. degree would be a better one if it embraced, in addition to the Medical examination, a special one upon Anatomy and Surgery, including Clinical Surgery, 7378, 7379.

Value of, and necessity for, special examiners in each subject in the Medical department, 7380-7385.

BAXTER, JOHN BOYD.—LL.D. of the University of St. Andrews; is president of the Society of Procurators of Dundee, and has for many years been Procurator-Fiscal of Forfarshire, 11,101-11,104.

A scheme mooted in Dundee for some time back to found a College there, 11,105; views upon that subject, and statement of what has been done, and reasons which led to proposal, read, 11,106; further particulars on matters of detail, 11,107-11,116.

Classes proposed.—A complete Faculty of Arts, as in other Universities; students to matriculate at University of St. Andrews; College to be affiliated to that University, being members of the University, and entitled, if sufficiently qualified, to have University degrees conferred upon them, but not receiving any part of their education at the University, except it were necessary to supplement it so as to correspond with the curriculum at St. Andrews, 11,118-11,126; objections to scheme discussed, 11,127-11,137; suitability of Dundee for institution of a School of Medicine considered, in view of infirmary and large population, 11,138-11,140; amount proposed to be raised to found College, £150,000, giving £500 a year to each of six chairs, and devoting balance (£75,000) to provide class-rooms, laboratories, and apparatus, 11,141-11,145, 11,155-11,157; of opinion that proposal that the same professors might teach in St. Andrews and Dundee would be impracticable for various reasons, amongst others, that it is desired professors should be resident in Dundee, 11,146-11,154; present educational deficiencies of Dundee explained, 11,160-11,167; considers that alternative of courses of lectures delivered in Dundee by professors of St. Andrews would not effect the purpose contemplated in the scheme of a College, 11,168-11,171; would be favourable to ladies being educated at the new College, 11,172.

BIRRELL, PROFESSOR.—Has been Professor of Hebrew and Oriental Languages in St. Mary's College, St. Andrews, since June 1871, and was for some time previously an examiner for degrees in Arts, 4689, 4690.

Constitution of University Court.—Is strongly of opinion that Court is too small in its numbers; additional representation required for graduates other than Medical; if possible, some legal element should also be introduced, to assist in working Act and Ordinances; or, alternatively, the

member for the Universities might have a seat in the Court, 4692-4704, 4706; suggestion that Court could be improved as an electoral body for distribution of patronage, by creating one Court of patronage for the whole four Universities, 4707-4721, 4778; would not be desirable to have senior and junior principals both in Court, but senior and junior might alternate, 4722-4724.

Functions of General Council.—Any addition to powers of General Council should be in the way of giving them additional representation in the University Court, 4725.

Faculty of Arts.—Would maintain curriculum of M.A. degree as it is, 4726, 4781, 4785. B.A. degree.—In favour of a lower degree being established, to be called the B.A. degree; proposed curriculum therefor, 4727, 4733, 4734, 4739, 4770, 4772. Proposal for B.Sc. degree, 4728-4730, 4732. B.D. degree.—Number of candidates might be increased if professors from dissenting colleges were admitted as co-examiners, 4739-4744.

Entrance examination for Faculty of Arts.—Considers it would be highly desirable to introduce gradually a moderate entrance examination, relegating subjects now taught in first year's classes to the higher schools, 4746-4758.

New professorships.—Should be a chair of Hebrew and Oriental Languages in Arts curriculum, 4579-4763; proposal to increase number of professors in Divinity in St. Mary's College subject to difficulty from number of students, 4764-4769.

Length of University sessions.—In favour of lengthening session by beginning in end of October and going on to middle of April, with interval of a fortnight at Christmas, 4773-4775; summer session would entail hardship on students at St. Andrews, 4776, 4777; advisable that opening and closing days of sessions should be fixed by statute, 4778, 4779.

Election of University officers.—Election of Rector should be fixed at beginning of session, 4779-4786.

Emoluments of principals, professors, and lecturers.—At St. Andrews the emoluments are in some cases very small indeed; patronage of Divinity chairs at present rests with the Crown; of opinion that if patronage were vested in the Established

Church, money value of professorships might be increased, 4787-4804, 4807-4811.

Retiring allowances of professors, etc.—Considers retiring allowances very inadequate, 4805-4807, 4812; would suggest that retirement should be made imperative at, say, 65 years of age, 4807.

BLACK, PROFESSOR, Aberdeen.—Is Professor of Humanity; has been so since 1868; was a student of Aberdeen University, took degree of M.A. there, and has been connected with the University for twenty-five years, 6331-6335.

Constitution and powers of University Court.—If Rector is to continue to be elected by Court, would discontinue election by students in nations, substituting that by the students voting individually, reasons; has, however, a decided feeling that Rector should not be elected by students, but by General Council, 6336-6338; General Council of opinion that in case of an equality of votes the last Rector should have a casting vote; personally, witness would prefer to give this veto to the Chancellor or Vice-Chancellor, 6337, 6338, 6346; if General Council are not to elect Rector, next best thing would be to increase their representation, by giving them two representative assessors; Senatus should also have two representatives; not desirable to increase number of members of University Court, 6339-6345.

Functions of General Council.—Would give power to principal, on receiving a requisition from twenty-five members, to call a meeting of the Council on an emergency between two ordinary meetings, 6347, 6348; Council should be authorized to appoint committees when necessary, and should have opportunity of discussing new measures before they are carried into effect, and of representing their views to the University Court; doubt on this point as to power under sec. 12 sub-sec. 2 of statute, 6349-6356.

General Ordinances.—Would suggest that these Ordinances should be made special, and issued, if necessary, in an identical form to each University separately; that each University should have power to apply to Privy Council for alteration of any Ordinance, and intimation of this should be

sent to the other Universities, in order that they might appear for their interest, 6357, 6358; opinion on vote by ballot, 6358, 6359.

Faculty of Arts.—M.A. degree.—Peculiarity in curriculum of students in Aberdeen; have to attend and pass in Natural History, in addition to subjects required in other Universities; proposes that an option of Chemistry should be allowed, 6360, 6361; also suggests as a change in curriculum for M.A. degree, viz. a scientific department, embracing Natural History and Chemistry, or Experimental Physics, added to present three departments of Classics, Mathematics, and Mental Philosophy; ordinary candidates to be required to pass in all these four departments; or would allow students to omit either Mental Philosophy or Natural Science, if they can pass with honours in any of the three departments remaining, 6361; strongly objects to institution of a degree in Science equal to that of M.A., or to any degree for a curriculum which should exclude Classical studies; grounds for this opinion, 6362; is in favour of a lower degree in Arts, to be called the B.A. degree; among the uses this degree would serve would be to form a basis for a teacher's diploma, as a suitable preliminary course for students in Medicine and Law, and it would also meet the case of such professions as engineers, architects, etc.; the curriculum should embrace English, Latin, and Mathematics (these three imperative), Greek optional; in addition, two other subjects, selected by student from ordinary Arts course; proposal further discussed, 6365–6372.

Entrance examinations.—Such an examination not required at Aberdeen, because nine-tenths of the students go to, and prepare for, the bursary competitions, which keeps up a very much higher standard than any entrance examination would give; probable effects of an entrance examination considered and discussed, 6373–6387.

Creation of new professorships.—Thinks additional professors are required; decided want for a Professor of English; others very desirable are, a chair of Education, and one of Roman Law. A higher tone would also be given to the University if the following chairs were created:—Romance Languages, with classes of

French and Italian attached, the latter to be taught by two persons; Teutonic Languages, Sanskrit, including Comparative Philology; improvement would be effected if professorship of Natural History were split into two, one of Geology and one of Zoology, 6388–6394.

Provision of assistants.—Salaries of assistants are deducted from the endowed funds, which go partly to professors' salaries (already too small); would suggest that assistants' salaries should, as in Edinburgh, be paid by a Parliamentary grant, 6395.

Length of University sessions.—Would not make much change; winter session might be lengthened by a few weeks, but would not change summer session, 6396, 6397.

Extra-mural teaching.—Objects to its introduction; reasons discussed, 6399–6402.

Emoluments and retiring allowances of principal and professors.—With a single exception (that of the chair of Anatomy), all the chairs in Aberdeen are underpaid, as also the principal, 6403–6406. Retiring allowances.—Thinks scheme adopted at close of last Commission has failed in effecting a tolerably rapid retirement on the part of senior professors; retiring allowances should be liberal, and a professor should have it in his power, if he chooses, to retire at sixty, 6406.

Appointments to bursaries.—Competitive are far more valuable than presentation bursaries; and of former, those are the most valuable which have the widest area of eligibility, 6407–6412.

Library.—Considers Government grant for library unfairly small in comparison with other Universities, 6413.

University buildings.—Want of shelter for students in stormy or wet weather; covered place required; professors' houses are scanty in accommodation, and deficient in modern conveniences, 6414, 6415.

BLACKBURN, PROFESSOR, Glasgow.—Has since 1849 been Professor of Mathematics in University of Glasgow; was clerk of the College from 1852 to 1859, and since 1863 has been chairman of Finance Committee of General University Fund, and is intimately acquainted with the working of the constitution under

the Universities Act of 1858, 8508-8512.

Constitution and powers of the University Court.—Considers there is a want under the Act of 1858 of power to make statutes that shall govern, for instance, the procedure of the Senate; these should be drafted by the Senate, and confirmed by the University Court; Senate should have no power of repealing a statute, except by altering it, and again sending it to the University Court, 8513; would not allow such statutes to make changes in the constitution, such as those for which consent of Queen in Council is required; rules made by University Court for its own guidance should also have sanction of Senatus, so that one could not repeal a rule without sanction of the other, 8514-8519; thinks that, with regard to power of Court to effect retirement of professors, they are too timid in exercising it, 8519, 8520; cannot say whether Court or Crown should be preferred as patrons in the appointment of professors, reasons for indecision on this point, 8521-8529; University Court has power to fix fees, but on a recent proposal to do so, the Court made the condition that with this should be combined an entrance examination; is of opinion that in regard to the entrance examination it was not a matter the Court could initiate; a new Act required to lay down their powers more exactly; present provisions are extremely vague, 8530-8532; suggests for improvement of constitution of Court that the principal and the four deans of the Faculties should be members of the Court, with, say, the convener of the Finance Committee; this would secure more knowledge of University affairs in the Court, 8533-8540; has not considered how many members Court should consist of, would not object to twelve, 8541-8546.

Functions of General Council.—Thinks their functions are very well arranged at present, 8546-8549; decidedly of opinion that they are a most unsuitable body to exercise any administrative functions, 8550, 8551; would not give power to adjourn or call a special meeting, 8552, 8553.

Course of study and graduation in Faculties.—No necessity for legislating on that subject, power of altering Ordinances with consent of Queen in

Council sufficient, 8554; does not think that greater option should be given to students in choosing subjects for which a degree can be taken, 8555-8557; no change required in graduation for Arts; degree in Science might be instituted, but not by altering degree in Arts, 8558, 8560-8562; suggests that degree in Science, as distinguished from Arts, should be similar to arrangement set forth in University Calendar of Glasgow, 8559; thinks institution of a Faculty of Science is necessary; Glasgow curriculum for degree of B.Sc. defined—in Biological Science, in Geological Science, and in Engineering Science, 8565-8567, 8573; attendance on a class should not qualify for a degree unless it has been *bond fide*, and certified as such by the professor, 8563, 8564; would not revive B.A. degree, and reasons for opinion, 8568-8572.

Entrance examinations.—Decidedly against any form of entrance examinations, 8574; reasons for this, 8575-8583; when Dean of Faculty, witness drew up a paper on subject, which was printed by Faculty of Arts, 8584-8586; paper put in in evidence, 8587; considers it would be better to raise present standard of University examination to bring up students to a higher point, but that object could not be attained by an entrance examination, which would keep away students at the beginning, 8588-8590; clever fellows who come up without a good education often turn out eminent men, list of several such, 8591-8593.

New professorships required in University.—If there is to be a new Act, it should be definitely settled who are to institute new chairs; present provisions are very vague, 8594; by existing rule, both the Crown and the Senate seem to have power to institute a chair; would make condition that Crown should have no power unless it found not only funds for the salary, but also for class-room and class expenses, 8595-8598, 8601; would be an improvement if new professorships could only be instituted by statute of the University, which neither the Court nor the Senate could break separately, 8599, 8600; would only suggest as a new professor, that a chair of History might be established, 8602-8605; does not consider Modern Languages should form the subject of

a chair, 8606; reasons for this opinion discussed, 8607-8611.

Provision of assistance and apparatus.—Chair of Physiology instituted by Crown, no provision but that of a salary of £75 a year; expense of furnishing proper laboratory and working apparatus for professor thrown on University; in witness' own chair considerable want of an examining assistant, i.e. one to go over written examinations; these in a session amount to some 10,000 quarto pages, 8612; has one assistant, who teaches junior part of class, 8613-8615; non-attendance of professor at junior class discussed, 8616-8620; assistants are entirely provided with salary by Government, and are in general insufficiently remunerated, 8621-8626.

Length of University sessions.—Would make no change, 8627.

Extra-mural teaching.—In Faculty of Medicine, if extra-mural teaching is sufficient, hardly sees necessity for the chair in a technical subject, but in a scientific subject extra-mural teaching cannot be substituted, 8628, 8629; of opinion that no benefit would be derived from extra-mural teaching in Faculty of Arts, 8360; objects to competition; results only in coaching men to pass a certain examination, and might lead to cramming, even on part of the professor, who if he disregards competition must diminish his emoluments; quotation from Mark Pattison's *Essays on Endowment of Research* to prove inexpediency of extra-mural teaching, and evils of external stimulus, 8631, 8633.

Mode of electing University officers.—Inexpedient that appointments should be made in vacation time, such as that of librarian by the Senatus, 8634, 8635.

Retiring allowances.—Of opinion that allowance should follow retirement at sixty years of age, as in Superannuation Act, 8636-8639.

Mode of appointment to bursaries.—Proper way is by competitive examination; some very valuable bursaries are not given by competition, 8640-8643, 8645, 8646.

Financial position of Universities.—Financial position of Glasgow University not satisfactory, a large debt on the building increasing at compound interest, 8647, 8650, 8679.

Financial position and administra-

tion of property of University.—Thinks it unfair that Glasgow has no funds from Government towards support or maintenance of buildings; all other Scotch Universities have, 8651-8654, 8675; also under strong impression that a certain allowance should be made for class expenses, to the relief of the University fund; at present there is paid out of General Fund, towards assistants and class expenses, an annual sum of £420, 8655-8658, 8662; Medical Faculty proposed to Senate in 1875, that additional Medical examiners should be paid out of General University Fund, to annual extent of £240, and report by Financial Committee thereon, 8659; the proportion of gross income of General Fund consisting of matriculation fees amounts to about one-fifth, 8660, 8661.

Libraries, Museums, and provision for management.—Other items of expenditure from General Fund are, the Library, the Museum, and the Observatory, 8670-8673, 8676-8678.

Class fees.—Is of opinion that it is time they were raised; sixty years since present fees were fixed, 8681-8683.

BLACKIE, DR. W. G.—Member of General Council of University of Glasgow; was clerk of General Council for first twelve years of its existence, and has attended its meetings pretty constantly, 3193-3195.

Functions of General Council.—Would to some extent alter or enlarge these functions; Council should have power to call intermediate meetings between the two statutory meetings, to appoint a committee to carry out definite instructions by the Council, and to communicate with other General Councils through their committees or otherwise, 3196-3198; advantages if this system were adopted, 3208-3215, 3228-3233; at present, University Court has power to 'effect improvements in the internal arrangements of the University,' provided that all such proposed improvements shall be submitted to the University Council for their consideration; would increase the power of General Council to this extent, that provided the Council disagree in opinion with the University Court, the Court shall be obliged to reconsider matter, and again submit their finding to the General Council, the latter having the power of repre-

senting the matter in reply to the second submission; advantages of this proposal discussed, 3198-3207, 3224-3227; objects to a proposal to give General Council a veto upon the University Court, 3198, 3205; would increase representation of Council in University Court by adding two additional members, being three representatives; proposal and mode of election discussed, 3216-3220, 3234-3246.

Course of study and regulations for graduation.—Is of opinion course of study for graduation in Arts should be more varied than it is; in addition to the three groups of subjects for which present degree of M.A. is granted, recommends addition of Natural Science as a fourth, making Classics and Mathematics obligatory, allowing the student choice of other two groups, and granting degree for proficiency in three, 3247, 3248.

Expediency of instituting new degrees.—Circumstances under which B.A. degree might be reinstituted, 3249; regulations and course of study proposed, 3250-3260.

Length of University sessions.—Present holidays too long; would place Universities on equal footing with English Universities, where students are allowed to take ordinary course in three years; this could be done with twenty-four months' teaching, of eight months' teaching in each year, instead of what is really only five by present arrangement of sessions; alleged difficulties as to this proposal discussed, 3261-3269.

New professorships or lectureships.—Considers subjects of Geology and Zoology ought to be separated, and a professor for each; subjects of Civil and Ecclesiastical History should be separated, with a chair for Civil History; also a Professor of the Gothic Languages, 3270; suggestion for institution of certain tutorships, with bursaries, to be held by honour graduates; and details of proposed scheme discussed, 3270-3286.

Entrance examinations.—In present state of secondary education in Scotland, thinks junior classes for Greek and Latin necessary in University, and that no examination for these should be required; would, however, require an examination for entrants to classes which qualify for graduation, 3287-3289; by whom such examinations should be conducted,

and what would constitute eligibility to be examined, 3290-3297.

Recognition of extra-mural teaching.—Considers that to a limited degree extra-mural teaching would form an object of ambition for graduates to qualify for, but does not think such teaching could be introduced as qualifying for a degree without endowing professors to a reasonable extent, 3298-3306.

Election of University officers.—Suggests that instead of election of Rector by four nations, or when a parity of these, by the Chancellor, a regulation should be made that Rector should be elected by a majority of votes, or by creation of a fifth nation, 3307-3309.

Constitution of University Court.—Of opinion that, whether by two additional members from General Council or otherwise, the Court should be increased in number to nine, 3310-3315.

BLACKIE, PROFESSOR, Edinburgh.—Is Professor of Greek in Edinburgh University, and has been so for about twenty-five years; was before that a professor in Aberdeen for eleven years, 6556-6558.

University Court and General Council.—Desires no change in constitution or functions of either, 6559-6561.

Course of study for graduation in Arts.—Course of study should contain greater variety of subjects, confining the number for M.A. degree to seven; certain new subjects should be introduced, giving option to students whether they would take one subject or another, some being imperative and others optional; imperative subjects, Latin, Greek, Mathematics, Natural Philosophy, and English Literature; optional subjects, Natural Science, Civil History, and if students passed a certain examination in Greek and Latin on entering College, would allow these to choose Latin or Greek for their M.A. degree, with option of either French or German for the other language; other options might be introduced, 6562-6573; before, however, such a curriculum could be introduced, secondary schools would require to be put right and allowed to work for some years, to secure that the student comes to the University sufficiently instructed in Latin and Greek, 6566, 6574-6576, 6587-6591.

Institution of entrance examinations.—Is in favour of having such examinations, but could not be well done at present; as an interim arrangement, might make examination general rule, and in regard to those not able to pass, give them a probation at the University, 6577, 6578; students who do not want a degree should be free to go to any class they liked, 6579; when in Aberdeen, conducted a regular entrance examination in Latin, but that for the competition bursaries acted practically as an entrance examination for the whole of the students, 6579-6581.

Expediency of instituting new degrees in Arts.—Sees no use in introducing the B.A. degree into University; thinks if there were two degrees in Arts, reputation of Arts degree, now highly esteemed, would degenerate, 6582-6586.

Creation of new professorships.—In Faculty of Arts (if new curriculum above proposed were adopted), three new chairs would be required, viz. Modern History, Teutonic Languages, and Romance Languages, one professor not to take up the two latter, 6592, 6593; considers it would be unadvisable to put Hebrew chair on a different footing, making it a philological chair for the cultivation of the Semitic Languages, 6594-6596; proposal that, as in Germany, professors might be appointed to a Faculty and not to a chair, thus leaving them a choice of subjects; working of system in Germany explained, 6596-6610.

Assistance in teaching.—Has an assistant, given by last Commission, and work is much better done; but half a dozen in a class of 200 would be required if the thing were rightly done, 6611-6614; alternatively, large classes might be subdivided, and let two or three tutors drill them properly, 6615, 6616.

Of opinion that summer classes are not required in Classical classes, 6616, 6617, 6667; small demand for Greek in Scotland commented on, 6617-6623.

Extra-mural teaching.—Is rather in favour of restoring right of intramural teaching to graduates of a high standard, their fees to be regulated by University, 6624-6632; some difficulties as to rate of their fees discussed, 6637-6644; emoluments of professors would also be affected

by this competition, 6633; would have them paid by a regular salary of, say, £500 a year, 6634-6636.

Patronage and election of University officers.—Of opinion that an improvement on present system might be made by avoiding patronage, wherein local, and ecclesiastical, and political influence is apt to appear, and substituting a body of Scotch notables, connected with all parties, but not in a special sense with any one party, such a body to appoint professors to all the Universities; proposed list of twenty members who might form such a court for administration of patronage, 6645; discussion of this proposal, 6646-6653.

Mode of appointment to bursaries, and their tenure.—Approves both of bursaries to encourage local schools and when young men enter the University; bursaries for higher attainments should not be given for more than four or five years; the holder of one of the latter should read two or three essays publicly on some branch of the subject for which he got the prize; no bursaries should be held for life, 6654-6657; would maintain presentation bursaries being given to poor students, but would subject presentees to a standard examination, 6658-6661.

All fees in the Faculty of Arts should be raised to four guineas; present rates have been in force since 1811, 6663-6667.

BLAIR, JAMES, M.A.—One of Her Majesty's Inspectors of Schools in Scotland, formerly for six years Mathematical master of Fettes College; is at present senior acting examiner in the Faculty of Arts in the University of Edinburgh, 9689-9694; conducts examinations for M.A. degree, also preliminary examination for Medical students, and for candidates in B.Sc., 9694-9697; method of conducting examinations and Board of Examiners described, 9698-9708, 9715; thinks University would get better men to examine in Arts degree if separate examiners were appointed for lower subjects, such as French, English, and Arithmetic, 9709-9713, 9730.

BROWN, PRINCIPAL, D.D.—Is Principal of Free Church College, Aberdeen, and a Doctor of Divinity of Aberdeen

University, where he was educated, 6156-6160; is a member of General Council, but not otherwise connected with the University, 6161-6163.

Functions of General Council.—Of opinion that Council should have power to hold intermediate meetings on emergency on requisition from twenty-five members, business being advertised for sixteen days previously; that Council be empowered to appoint committees, but not to delegate their powers; and that all improvements or alterations in internal arrangements of University designed by the University Court or Senatus, shall, before being carried into effect, be submitted to the Council, 6164; these proposals further discussed, 6165-6177, 6217-6225.

Constitution of University Court.—The Court should be increased in number from present number of six; different methods of doing so discussed, 6178-6196.

Graduation in Arts.—Agreeable to an extension of studies, to admit persons who could not take M.A. degree, not by widening curriculum for M.A., but by creating a new degree; reasons given for this opinion, and necessity for retaining study of Greek for M.A. degree, 6197, 6198; new degree proposed to be B.A., and suggestions for subjects of study, 6198; would not have Modern Languages taught in Universities, but of opinion that there ought to be a Professor of Modern Languages, treating of the Teutonic and Romance branches of them, in every University, 6198.

Entrance examinations.—Not so much required in Aberdeen from number of bursaries; influence of backward condition of secondary education in Scotland militates against introduction of entrance examinations; suggestion for a Commission on secondary education, 6199-6202.

Extra-mural teaching.—None at present in Aberdeen University; would have no objection to extra-mural teaching in any Faculty, where a sufficient apparatus is required and provided, 6203-6208.

Hebrew chair in the Universities.—Ought to be continued as a branch of the Theological Faculty, and not separated from the teaching of the Hebrew Bible, 6209-6212.

Desires to see a chair of the Semitic Languages in all Universities, 6213, 6214.

Length of sessions.—Not inclined to lengthen them, 6215.

BROWN, CRUM, PROFESSOR, Edinburgh.—Is Professor of Chemistry in Edinburgh University, and has held office for seven years; is also one of the conveners of the committee of the Senatus for Science degrees, 1401-1403.

Provisions for assistance and apparatus for chair.—Gave full evidence on these subjects in 1872 before Royal Commission on Scientific Instruction, 1404, 1405; some points of difference between then and now are, an allowance of £25 a year for lighting, heating, and cleaning, £200 a year for assistants (£100 to demonstrator of Practical Chemistry, and £100 to chief assistant in laboratory); witness pays, at his own expense, £50 to chief laboratory assistant, and £100 to a lecture assistant, besides paying three servants, whose annual wages amount to £174, 4s.; Senatus, out of the Hope Prize Fund, have created a scholarship, worth about £30, held for one year, 1406-1408; the whole of the chemical apparatus and substances in the University are practically the private property of witness, there being no money available to enable the University to purchase such things, 1409-1411.

Constitution and powers of University Court.—Is quite satisfied with constitution of Court as it is at present; objections to proposal to give additional representation to the General Council, 1412-1416; if, however, latter were given, Senatus should have corresponding additional representation, 1417; considers there is a disadvantage in some cases with respect to origination of business by the University Court; example given in case of proposed alteration of an Ordinance by University of Glasgow, 1418-1422; with reference to appeals, nothing in present law or Ordinances fixes the period within which an appeal must be taken; this renders it impossible to know when a decision of Senatus has become final, as there is always an appeal open; case illustrating evil of this, where the matter involved an individual interest, 1423, 1424;



thinks time should also be limited for appeals from Senatus to the University Court in matters of general regulation, and reasons, 1425-1431.

Functions of General Council.—Sees no reason to make any change in these, 1432.

Courses of study and regulations for graduation in Faculties.—Would suggest greater amount of choice as to subjects in which candidates for M.A. degree may graduate; would institute, after the student had been some time at College, previous examination in certain fixed subjects, after which would allow candidate an option of subjects, arranged in groups; suggestions as to possible optional subjects, 1433-1444, 1451, 1452.

Institution of entrance examinations.—Has great hesitation in expressing an opinion, but thinks that, subject to secondary education being improved, the examination now applied only to students who take curriculum of three years would by and by become applicable to students generally as an entrance examination, 1445-1448.

New professorships required in Faculty of Arts.—Those most required are professorships of Languages, such as Teutonic Languages, Romance Languages (French, Spanish and Italian), and Slavonic Languages, would also like to see a Professor of Chinese, 1449, 1450.

Would re-establish a B.A. degree, by calling present M.A. degree B.A., and placing M.A. degree upon a higher level; reasons for opinion, 1453-1467.

Faculty of Medicine.—Some changes desirable in course of study and regulations for graduation; that the subject of Natural Philosophy should be added to the course, and taken in the first professional examination; proposal discussed, 1468-1474; favourable to a suggestion that men should be allowed to come up to be examined in any given subject whenever they choose; advantages of this proposal, 1475-1486; desirable that Medical Faculty should have additional teachers for special departments, which professor under whose subject they fall has not time to treat in detail; necessity for a chair of Clinical Medicine, 1487-1503.

Extra-mural teaching has, in the

experience of the Medical Faculty, been found to work very well, 1504; one point, however, on which there is difficulty, viz. in reference to recognition of extra-mural lecturers who are not resident in Edinburgh; nature of difficulty described, 1505-1510.

Emoluments of Medical professors.—Thinks that emoluments of professors of Medicine proper are inadequate, and ought to be increased, because the University is yearly taking up more of their time, so as to take from their private practice, 1511-1516; is of opinion that extra-mural teaching should be introduced into other Faculties; would not confine privilege to graduates of the University, but extend it to those of any British or Irish University, 1517-1520.

Extra-academic lecturers are already to a certain extent recognised for degrees in Science, but a necessity exists for some improvements in present regulations for these, 1520-1522; is further of opinion that in all the Faculties it would be highly advantageous that lecturers should be licensed by the University to teach on subjects other than those included in the curriculum for the degree, such as Metallurgy, Chemical Mineralogy; and in special departments of Medicine and Surgery, Insanity, Ophthalmic Surgery, Dental Surgery, 1523.

Election of University officers.—Proposals as to changes in mode of electing professors discussed, 1524-1536; has no desire to increase Crown patronage of professors, 1537-1539; suggestion that patronage of chair of Botany should be transferred from curators to the Crown, in exchange for some *regius* chair of equal value, 1537.

Endeavour to provide a consulting library, as distinct from the lending library, much hampered by want of funds; of great importance to students that such should be created, 1522-1545.

BROWNING, JAMES, LL.D.—Is M.A. and LL.D. of the University of St. Andrews, and a member of the General Council, 10,811, 10,812.

Has been practically engaged in teaching for nearly forty years, 10,813; has been appointed by the General Council to represent their opinion

that degree of B.A. should be restored; General Council were unanimous in this opinion, in which witness concurs, 10,814-10,818; reasons for thinking so, 10,819-10,820.

Curriculum proposed as compulsory for degree of B.A.—Logic, Mor Philosophy, Latin, and Mathematics; would also have optional or alternative classes; instead of Greek, would give option of taking German, or English Language and Literature, or Natural Philosophy, or Chemistry, or Political Economy, or some branch of Natural Philosophy, 10,821-10,826, 10,833-10,835; inclines to opinion that holder of B.A. degree should be a member of General Council, 10,843-10,845; further reason for desiring revival of B.A. degree, that future teachers of primary and secondary schools might be induced by the prospect of such a degree to obtain the advantages of University influences and culture, 10,846-10,855; effect of revival of B.A. degree on number going up for M.A. degree discussed, 10,838-10,842.

Entrance examinations.—No student should be allowed to enter classes of Latin, Greek, or Mathematics unless he has passed through school drill preparing him for an advanced class, and nature of such examination, 10,826, 10,828, 10,829; of opinion that secondary education would be improved to meet such an examination, 10,827; admits that effect of Education Act and Revised Code has been to lower primary education, 10,830-10,832; of opinion that degrees with honours should be made national instead of provincial, and should be conferred by representatives appointed by the four Universities, consisting of professors and other examiners, appointed either by Government or by the University Council, 10,856-10,858; scheme further described and discussed, 10,859-10,873.

M.A. degree.—Compulsory subjects to be same as in B.A., with addition of Natural Philosophy, Chemistry, and Greek, and would allow option of some department of Natural Science, or some higher department of Philosophy, Natural Science, History, or Political Economy, 10,874, 10,879-10,882; proposal that instead of making students pass in three departments, of Classics, Philosophy, and Mathematics, a cer-

tain proficiency in one department should be allowed to compensate for deficiency in another, 10,874; suggests, for instance, that, as nearly one-fourth are plucked for Mathematics, 90 per cent in Classics, and 90 per cent in Philosophy, with only 5 per cent. in Mathematics, should pass for degree, eminent scholars having sometimes been utterly unable to work Mathematics, 10,875-10,878.

Opinions on suggested establishment of a College in Dundee in connection with St. Andrews University, 10,883.

Library.—Thinks it of great importance that library catalogue should be finished as soon as possible, 10,900-10,908; further of opinion that members of Council of one University should have privilege of reading in the library of any other University, on payment of a small sum, 10,909-10,918.

Constitution of University Court.—Should consist of larger number of members than at present, say nine members instead of present number, six, 10,919-10,936.

Retirement of professors.—Facilities for getting rid of inefficient professors would be increased if retiring allowances were larger, 10,937, 10,938; objects to a fixed age for retirement; should not, where efficiency exists, be compulsory, 10,939.

Disapproves of patronage of University chairs by private persons; three chairs in St. Andrews vested in private individuals, 10,940, 10,941.

BRYCE, JAMES, M.A., LL.D.—Is a graduate of the University of Glasgow, a Master of Arts, and Doctor of Laws; was for twenty-eight years mathematical master in Glasgow High School; has taken great interest in University reform, and originated the Graduates' Society of 1849, which was one of the movements leading to the Universities Act; thinks the Act is still capable of much improvement, 8978-8985.

Constitution and powers of University Court.—Thinks Court too small, and that there should be eleven members, to include three assessors from the Senate, and three from General Council, the system to apply to all Universities, and would thus give Courts of twelve in Edinburgh, eleven in Glasgow, and ten in St. Andrews and Aberdeen; would assign

a quorum of seven at least; Court so constituted should exercise same powers as now, 8986-8998.

Functions of General Council.—Fears Council is in danger of dying out for want of larger powers; would give power to adjourn meetings, and of calling special meetings when emergencies, such as death of a Chancellor or assessor, arose; special meetings to be called on a signed requisition of, say, 100 members, 8999-9014.

Graduation in Faculty of Arts, etc.—In M.A. degree, of opinion that a course of Natural Science—one or two branches of Natural Science, Botany, Zoology, or Mineralogy—ought to precede Logic course as an imperative course, and a short elementary course of Natural Philosophy ought also to precede Logic and Ethics; does not think this would overweight the curriculum, because student could afterwards take Mathematical course only, 9015-9019; discussion of this proposal, 9020-9026, 9037; would allow B.Sc. degree to stand as it is; would not eliminate Greek or Latin from course, 9020, 9026, 9027, 9044-9047; present arrangement as to taking a degree with honours satisfactory, but would propose that more publicity should be given by advertisement of honour lists in the newspapers, 9028-9034; degree of B.A. should be revived, but would make it as high as present M.A., and equalize it with B.A. of London University and the Queen's University of Ireland; status of both degrees would be raised if B.A. were revived, and something—an examination or discourse—superadded to obtain degree of M.A., 9035-9042, 9045; B.A.'s should have all privileges of the franchise, political and University, possessed by M.A.'s, 9048.

Entrance examinations.—Strongly in favour of instituting; would make passing compulsory for admission to degree course, 9048-9050; examination would require at first to be made rather easy, and increasing in difficulty in, say, periods of two years; proposed subjects for first examination—in Mathematics and Arithmetic, first two or three books of Euclid, fractions and decimals; elementary rules of Algebra, and simple equations; in Classics, some books of Horace or Virgil, with translation of Latin into English, and English into Latin; in

Greek, to be able to read any passage in the New Testament *ad aperturam*, and examination in such books of Xenophon as he chose to 'profess,' 9051-9054; believes that there are enough secondary schools to educate for this test, if a few more were established in North and West Highlands; and that if the harm done to primary schools by the Privy Council system were removed, by modifying the Code so as to discourage the higher premiums upon the lower subjects, these would also be available, 9056-9062; effect of examination would be to abolish present first Latin and Greek classes in the University, and to reduce the Arts curriculum from four years to three; would give a year or two of warning before introducing system, 9063-9066; objection that entrance examination might exclude young men and others who merely wish to attend College without taking a degree, could be met by entering them as non-matriculated students, 9067-9073; to secure uniformity of the entrance examinations in the different Universities, a central board might be constituted for the purpose, consisting of the teachers of the several schools, with the assistance of a Government Inspector of Schools, as in Germany in the *abiturienten* examination, 9074-9080; details of scheme further discussed, 9081-9094; objects to fashion in Scotland of sending lads to Rugby and Harrow, on ground that the education there is inferior to what can be obtained in Scotland, 9095-9103.

New professorships or lectureships.—No new chairs required in Glasgow, but very great want of lectureships; one on Mineralogy and Mining connected with University much required, in connection with which there should be a laboratory, specimens of different ores, and experiments to find best means of reduction, 9104-9112; chairs of Education ought also to be established in Glasgow and Aberdeen, similar to those in Edinburgh and St. Andrews, attendance on which ought to be required of all teachers, including schoolmistresses, 9113-9120.

Suggests that distinguished men in Oxford and Cambridge who have gone from Scotch Colleges on scholarships or exhibitions, should be made eligible for election to the examining body for degrees, 9121-9125.

Provision of assistance and apparatus.—Would be highly desirable that a collection of apparatus, such as exists in the *Realschule* of Germany, should be provided in the College, 9126, 9127.

Length of sessions.—Does not think they should be altered or prolonged, 9128-9132.

Extra-mural teaching in Faculty of Arts.—Of opinion that its introduction would not be desirable, 9133-9137; supplemental teaching inside the College by tutorial lectureships would be preferable, 9138-9143.

Professorships of Theology.—With the reservation of a declaration of belief in Scripture and in the doctrine of justification by faith, would admit members of all Presbyterian Churches to chairs of Theology, 9146-9153.

BUCHANAN, PROFESSOR, Glasgow.—Is a Doctor of Medicine of St. Andrews, and Professor of Clinical Surgery in the University of Glasgow; this chair instituted in 1874, and witness appointed the first professor, 9792-9796.

Faculty of Medicine, course of study and regulations for graduation in.—At present, for the two degrees of Bachelor of Medicine and Master in Surgery, the examination is the same; suggests that the M.B. should be exempted from Operative Surgery as imperative, allowing the student to get it either in the University or from an extra-mural teacher; but for C.M. degree would make an examination in Operative Surgery imperative, 9797-9808; if by Ordinance Operative Surgery be made an imperative course, its teaching should be made a part of the duty of the Clinical chair, to the exclusion of the theoretical chairs; reasons for this opinion, 9809-9820; Medical students generally attend Clinical teaching in the New Infirmary, 9821-9825; there are also extra-mural teachers in both infirmaries, and students may, if they choose, attend both, 9826-9829.

New professorships required in Medical Faculty.—In the Universities generally would have Clinical chairs where they do not exist—one of Surgery and one of Medicine in each University, 9830-9833; advantages which would accrue, 9834-9837; in Medical Faculty of Glasgow, additional tutorial assistants to chairs,

teaching a great deal of detail, would be most valuable, 9838, 9839; proposed special functions of such assistants, 9840, 9841; class of men to be chosen, 9842; thinks a salary of £50 would be sufficient, 9843.

Emoluments and retiring allowances of professors.—Emoluments of many of the chairs are not large, and might reasonably be increased, 9846, 9856-9864; in case of witness' own chair, salary is £110, and in 1876, total emoluments, including fees, were £230; for University reasons, would strongly urge an increase of the emoluments of the chair, 9847-9854; further peculiarity connected with the Clinical chair in Glasgow—the fee is not taken by the professor himself, but is payable to the superintendent of the infirmary, and is divisible; further, the student is allowed to change from one teacher to another every three months, resulting in the fee being thus divided among the various teachers, 9857-9859; same course is taken with reference to Medical fees in the infirmary, and something similar in the Royal Infirmary; considers this arrangement most undesirable, 9860-9863; against increasing the emoluments of the chairs by raising the fees of students, 9864; should say that from £400 to £500 would be a suitable salary for the practical chairs, where the professors are in private practice; but the scientific chairs of Anatomy, Physiology, Chemistry, Natural History, and Botany ought to be larger, in view of the fact that the professor should give his whole time to these, and give up private practice, 9865-9877.

Suggestion that Commissioners should consider the share to be taken by the different professors and examiners in the examinations for degrees, and to what extent the duty should be appropriated to each, 9878-9889.

*Re-examined.*—In addition to evidence formerly given, desires to state that the Clinical chairs in Glasgow should have the same position as the chair of Clinical Surgery in Edinburgh, i.e. they should have exclusive right to the term 'University,' as applied to their students, courses of lectures, class tickets, and certificates of proficiency; and should also have the exclusive right to award University medals and class honours to the stu-

dents attending their lectures, 11,506, 11,507; reasons for this proposal discussed, comparison between practice in Glasgow and Edinburgh Universities, and contention for the establishment of a rule defining the privilege of the Clinical professors, 11,508-11,541.

**BURNS, J. CLELAND.**—Is a member of the General Council of Glasgow University; has taken great interest in the proceedings of the Council ever since its origin in 1858, 8684, 8685; has been nine years convener of the General Business Committee, 8686.

Various reports of Committee of General Council read, detailing their resolutions on the subjects of the constitution and powers of the University Court, and the functions of the University Council, 8687-8707; and these resolutions discussed, 8709-8711.

Details of proceedings in reference to a Bill brought into Parliament 'to remove doubts as to the power of the Universities of Scotland to admit women as students, and to grant degrees to women,' 8708-8710.

Points proposed by General Council for discussion considered; objection to voting of General Council being conducted by voting papers; would prefer that meeting should be called by thirty members, and advertised three separate times in various newspapers throughout Scotland, and twice at least in the *Times*, 8711-8714; would entirely object to stipulation that requisition should receive sanction of the Chancellor, 8715-8717; alternative proposal that special meetings might be called by letter to each member of Council in the United Kingdom, 8718, 8719; of opinion that Council has power to petition both Houses of Parliament; question as to such power discussed, 8720-8724; doubtful as to whether it is advisable that General Council should have power to apply for an alteration of Ordinances, instead of leaving that to University Court, on a representation from General Council, 8725; another reason for holding this opinion is, because since 1858 there has been no abuse of patronage on part of University Court, 8726; enlargement of University Court necessary, especially by increase of representatives from the Council, 8726;

thinks that majority should have the election, 8727-8732; objects to proposal that Lord Provost should be a member of Council, or that there should be a nominee of the Lord Provost and Magistrates, 8733-8735; thinks that as regards publication of proceedings, if these were published with discretion of the Court, under sections 12 and 19, it would be useful, 8736-8740.

Regarding election of Rector, would adhere to present mode of election by nations of Rector, with alteration of dividing the four nations into five, this to be arranged by dividing one of the nations, 8741-8746.

To give General Council more effective voice in University Court, has to propose that this would be secured by appointment of two additional assessors, and the power of adjournment and of calling special meetings, 8747.

Expediency of instituting new degrees.—Is in favour of establishing B.A. degree, giving the franchise, as being valuable to many not going into professions, as schoolmasters and others; advantages likely to arise from this arrangement, 8748, 8753-8757; reasons for wishing B.A. degree restored, as distinct from M.A., 8749-8751.

Entrance examinations.—In preference to compulsory entrance examinations on entering College, would strongly prefer an examination at end of first year, before going from first to second class, this with a view to prevent exclusion of first year's students, who could work up for second year's examination, 8758, 8759; does not believe secondary schools are at present in a position to conduct a 'leaving examination' equivalent to an entrance examination at the University, as is done in higher class English schools, 8760.

Length of sessions.—Would not be prepared to go in for adoption of a summer curriculum, and reasons, 8761-8763; as to alternative view, that evening classes should reckon as part of curriculum, does not think they would suit, 8764, 8765; would prefer system of local examinations, 8766, 8767; how these might be conducted, 8768, 8769.

Extra-mural examinations.—Is not prepared to enter into consideration

of propriety of, 8770; thinks University should take greater interest in middle class examinations; how this might be effected, 8771.

**CÆSAR, REV. DR., Tranent.**—Is minister of parish of Tranent; attended full curriculum at St. Andrews, but did not graduate as M.A.; has received degree of D.D., 2506–2508; is a member of General Council, and has attended its meetings for past five years, 2509, 2510.

**Functions of General Council.**—Of opinion that General Council should have one additional representative in University Court, 2511, 2512, 2583, 2584, 2586, 2544, 2585; considers functions of Council should be enlarged, by granting power to hold adjourned meetings, to appoint committees, and to hold special meetings on requisition of, say, twenty-five well-known members of Council; discussion of these proposals, 2513–2527, 2534, 2535; not prepared to recommend that General Council should have power of appeal upon the action of the University Court, 2528–2532.

**Constitution of University Court.**—It is the opinion of the General Council that the Rector, who is a member of the Court, should be elected annually, instead of, as at present, every three years, the same person being eligible for re-election, 2545–2549; of opinion that the assessor of the Rector should be confined to members of the General Council; neither present nor last assessors were members; reasons for holding this view, 2550–2554.

**Graduation in Arts.**—Thinks it would be a good thing to have a degree, such as B.A., below M.A.; suggests for this degree two years' study, and examination in Latin, Greek, and Mathematics, 2556–2560.

**Entrance examination.**—Agrees with Council that there should be an entrance examination; at first it should not be a severe one, but the standard should be gradually raised; would examine amateur student only in subject to which he was devoting himself; latter proposal discussed, 2561–2569; general entrance examination for first year's students might be limited to Latin and Greek, 2570–2572.

**Emoluments and retiring allowances of professors.**—Of opinion that present emoluments are insufficient,

2573; has not considered subject of retiring allowances, 2574.

**University library.**—General Council of St. Andrews are, with witness, unanimous in recommending that the members of General Councils should have access to the University library nearest which they reside, and that there should thus be an intercommunication between the four Universities in this respect; effects of such an arrangement discussed, 2575–2583.

**CAIRD, PROFESSOR EDWARD, Glasgow.**—Is Professor of Moral Philosophy in University of Glasgow; was originally a Glasgow student, and having obtained a Balliol exhibition, went up to Balliol College, Oxford, 9154, 9155.

**Constitution and powers of University Court.**—Extremely doubtful whether there would be any gain in increasing number of the Court; in the event of an increase, it should be in the direction of the scientific element in the Court, 9156–9158; would give election of such new members (to the number of two) to the Senate, 9159, 9160, 9167; thinks claim by General Council for increase of representation in Court should not be granted, 9161–9166; or if granted, would make such increase by giving General Council power to elect the Chancellor as an additional representative in the Court, 9168, 9169.

**Difficulty which has arisen in Glasgow as to powers of Court, under sec. 12 of Act of 1858, to censure or suspend professors, 9170; opinion in Glasgow is that an accuser is required, who should be some one outside of the Court, 9171; necessity for a declaration as to whether this view is correct, a different interpretation of the section having been adopted elsewhere, 9172–9175.**

**Functions of General Council.**—Considers the meetings of Council, which take place once every half year, afford sufficient opportunity to ventilate their views, but would not object to power being given to the Council to hold an extra meeting on the occasion of a vacancy in the office of assessor or Chancellor, 9176–9182.

Thinks that power to adjourn a meeting would be undesirable, 9183, 9184.

**Course of study and graduation in Faculties.**—Faculty of Arts, arguments for and against an extension of, stated, 9185, 9186; would prefer

that M.A. degree should be enlarged, by alternative lines of study being given, such as a Biological department—taking in Botany, Zoology, and Physiology—and a History department, either of which otherwise able students, totally devoid of talent for Mathematics, might substitute for the latter subject, 9186, 9187, 9191-9201.

Suggests as alternative, should present Arts degree be retained, the creation of different degrees in Law, Biology, and Geology, etc., with separate courses of study; proposed curricula for these degrees, 9187, 9190-9197; present B.Sc. degree in Glasgow of considerable advantage, because it can be attained by the ordinary student, 9188; B.Sc. degree in Edinburgh is a higher and more difficult degree, 9189. B.A. degree.—Of opinion that, on the whole, it would be desirable to revive the degree, 9202; suggestions as to necessary curriculum; University attendance required should be two years, 9203-9208.

Effect of revival of B.A. upon M.A. degree discussed, 9210-9212.

Would suggest as an improvement on present system of awarding honours after graduation, that there should be at least three classes in honours, 9213-9219; further of opinion that honours should be given in English Literature, and also for high attainments in Hebrew, 9220-9223.

New professorships or lectureships.—For Legal education and degree of B.L., Civil Law, which is now optional, should be made imperative, and a class for Civil Law instituted—both as a branch of Law and for ordinary History a chair is required; one man might teach both, 9224-9227; a chair or lectureship of Political Economy is also needful; at present witness gives an entirely independent course of thirty or forty lectures on the subject every alternate year, which is entirely voluntary, 9228-9235.

Entrance examinations.—Should be in favour of entrance examinations with certain restrictions, and reasons given as generally urged for this restriction, 9236, 9237; difficulties, from inefficient state of primary and secondary schools at present, discussed, 9238-9243; proposal as solution of difficulty, that every entrant should pass a local examination for junior classes in connection with the University, equal to the junior certificate already in use in Edinburgh;

curriculum of common and special subjects in this local examination, 9244-9246.

Alternative of having an examination at end of first year by all who wish to enter upon curriculum considered, 9239, 9247-9250.

Believes that if an entrance examination were compulsory, the schoolmasters would prepare for it, 9251, 9252.

Assistance and apparatus for present or future professors.—Of opinion that most of the professors require some assistance, 9253; some assistance obtained from recently-appointed scholarships founded by Mr. George A. Clark, value £200 a year—one each in Classics, Mathematics, Philosophy, and Natural Science, 9254-9257; witness has also some assistance from the Euing Fellow, appointed this year, 9258; has no assistant provided from funds of University, and additional assistance to Philosophy classes is required, 9259; the Logic class, still larger than witness's, requires assistance even more; 9261; thinks £100 a year would be sufficient for such assistants, 9260.

Length of University sessions.—Does not think that, on the whole, any change in the length of the session is desirable or called for, 9262-9266; obvious advantages which present arrangement adds to the chairs, 9267.

Extra-mural teaching.—Could not be entertained in Faculty of Arts, unless an addition were made to the salaries of the professors, 9268-9270, 9320; extra-mural teaching would have the effect of lowering the standard, 9350-9358; is in favour of a small addition to the fees, 9271-9273, 9277, 9318; of opinion that if extra-mural teaching is not introduced, there ought to be two or three Professors of Latin, 9274; to these part of the emoluments from extra fees might be given, 9278.

Regulations as to electing University officers.—Of opinion that as to election of Rector, the students would prefer election by an aggregate poll to present mode of election by nations, 9279-9284; objects to proposal of older students that junior students should be disfranchised, 9284, 9285; agrees with the election taking place, as at present, at the beginning of the session, 9286-9288.

Present duties of principals should

not be changed; objects to proposal to rotate principalship among the professors, as is done in Germany, as undesirable, 9289-9297; thinks present declaration exacted from all professors is rather objectionable, so far as they are expected to declare they will do and teach nothing (directly or indirectly) contrary to the doctrines of the Church of Scotland; objection applies to the chairs teaching Physiology, Philosophy, and Geology, 9298-9306; further thinks tests for the Divinity professors are too strict, and reasons therefor, 9307-9317.

Emoluments and retiring allowances of professors.—If no extra-mural teaching, would not be necessary to increase salaries of Arts professors, supposing the fees were raised, 9318, 9319; but if extra-mural competition on equal terms for classes for degree, salaries would require to be raised, 9320-9322.

Retiring allowances of professors.—Of opinion that after thirty years' service no special certificate of ill-health should be required from a professor, and thinks it would be a gain to University to give such professor his full salary as a retiring allowance, and oblige him to retire, 9323.

Might be desirable, if a professor retires earlier, say after twenty years' service, from ill-health, to raise the proportion a little, 9324.

Mode of appointment to bursaries, scholarships, etc.—It is exceedingly desirable that all bursaries should be open to competition, 9325; very valuable scholarships in Glasgow not open to competition, 9326-9329; in some of these a provision that holder shall give assistance in teaching, 9330-9336; doubtful as to whether any bursaries should be given on the ground of poverty, even with an examination, 9337-9346; extreme difficulty of securing a good administration of presentation bursaries pointed out, 9347-9349.

CAIRD, PRINCIPAL.—Principal of the University of Glasgow for three years, and for ten years previously Professor of Divinity there, 222, 223.

Constitution and powers of University Court.—With reference to power under section 12 of Act of 1858 to censure or suspend a principal or professor, suggests—1st, that it should be specified at whose instance the investigation is instituted; and 2d,

that the Court should have power to summon witnesses; reasons for these views, 224; thinks that Court's power to initiate a process should be distinctly laid down, and that professors and students should have no option as to giving evidence; case quoted proving need of this, 224, 225, 294.

Questions as to who should institute proceedings, 226-229.

Has occurred to witness that decisions of the Court should be exempt from revision of Civil Court; reasons for this opinion, 230, 231-234.

No means under Scotch Reform Act of 1868 of giving uniformity to decisions of the four University Courts, as appellate Courts, in the matter of registration, 235, 236; suggested remedy—that representatives of four Courts might constitute an appellate Court for the Universities, 237; or, alternatively, decisions of University Court might be subjected to review by Court of Session, 238-240.

No change required in constitution of Court under section 9 of Act of 1858, 242-245.

Objects to increase of representation desired by University Council, 246, 247; assessor is really the only representative of the Senate in the Court, 248-250, 277, 278.

Dean of Faculties.—Office peculiar to Glasgow; appointed by Senatus, and is merely a member of the Court, 251-254, 279-281, 287-289.

If additional representation is given to General Council, corresponding addition should be given to Senate, 254, 255.

Functions of General Council.—Witness presides at all meetings of the General Council, 256, 257; average attendance of members, out of about 3000, is not 150, 258-260.

No further power in the government of the University should be given to the General Council, 261, 262, 282.

Would not extend power of Council to initiate measures of reform within University, 264; would not give General Council power of either check or veto in regard to internal alterations in University, 265, 266.

Objects to give power of adjournment of meetings, 267, 268, 273.

Is doubtful as to giving power of General Council to hold special meetings, 269.

Desire of General Council for further representation in the University



Court discussed, 271, 272, 274, 282, 283-285.

Objects to M.P. for University being *ex officio* a member of the University Court, 284, 286.

Quorum in University Court discussed; inexpedient to reduce it, 290-292; power of Senatus in superintending discipline and teaching of University discussed, 293, 294.

Faculty of Arts, course of study and graduation in.—Considers that curriculum for degree of M.A. would be improved by widening field of study, and giving candidate a choice of subjects; degree in Arts should be the invariable termination of course of study; would propose dividing course of study for ordinary M.A. degree into five groups of subjects, any three of which should qualify; departments should be—(1) Classics, Latin, and Greek; (2) Ethics and English Literature; (3) Mathematics and Natural Philosophy; (4) Natural Science, subdivided into groups or separate subjects, any four of which might suffice; and, if the necessary chairs were provided, (5) History, Social and Political Economy, and either English, French, or German; proposes a higher examination in each department for honours, 296, 297, 338-341, 349, 350, 374, 395.

B.A. degree, revival of.—Would propose that it should be granted for an examination in any two of the departments required for M.A., 296, 297; advantages attendant on re-institution of degree of B.A., especially to class who attend for a shorter period only, 298, 303, 394; dissents from reasons of last Commission for abolishing B.A. degree, viz. that the persons graduating had not completed the ordinary course of study, 299; would not make B.A.'s members of General Council, 300-302; proportion of students that proceed to M.A. degree, on an average of fifteen years, is about one in twenty-six, 304; table showing number of students and graduates in Arts in each year from 1860-61 to 1875-76, 305-307; probable effect of introducing B.A. degree on number who take M.A. degree discussed, 303, 309-320, 333, 377, 378.

Bachelor of Science degree.—Qualification defined and discussed, 321-330.

Suggests that the several honours in the departments for M.A. degree might be specially designated,—in

Science, D.Sc.; in Philosophy, Ph.D.; in Classics, Lit.D.,—affording a permanent indication that graduate had taken honours, 330.

Proposal to secure uniformity of examination, by the extra-professorial examiners circulating round the Universities, 331.

Considers that proposed divisions for M.A. degree would not interfere with the numbers in the Arts classes; any falling off would be simply a question of increasing the salaries of such professors as suffered, 333-336.

M.A. degree.—Science of Language and Comparative Philology not among subjects for graduation, as they are not taught in Glasgow University, 345-348, 396.

The institution of entrance examinations.—Reason for instituting such is, that the Scotch Universities have been, in their junior classes, doing the work of secondary schools, for which they are unfitted; if all students coming up had a knowledge of the elements of Classics and Mathematics, the professors could give higher teaching; quotes statistics by Professor Ramsay, showing that most students entering junior University classes are ill prepared, 353; objections to proposal discussed and answered—1st, that such an examination would reduce the number of students and emoluments of professors; and 2d, that, owing to scarcity of secondary schools, many who now come up could not get the preparatory instruction required; considers that institution of entrance examinations would multiply secondary schools, 353, 356-366; proposes as subjects of examination, any three of the following:—English, Latin (which would be imperative), Greek, one modern language, Mathematics, 353, 354; teachers and others, who only come to college for a year or two, might be exempted from examination, 353, 355; majority of students come direct from the parish schools, most of whom could not pass proposed examination; effect of Education Act has been prejudicial to higher teaching in primary schools, 379-382, 389-391.

Existence of secondary schools essential to institution of entrance examination, 383-388, 392, 393.

New professorships required.—In Faculty of Arts, three new professorships required,—viz., Political Science

(including Political Economy), History, and Modern Languages and Literature; one for the Science of Language and Comparative Philology also desirable, 895-897; in Faculty of Medicine, thinks present chair of Institutes of Medicine should be limited to Physiology, and a new chair of Pathology instituted, 898, 899; in Faculty of Law, for LL.B. degree three new chairs necessary, —viz., Civil Law, Public Law, and Constitutional Law and History, 400-402.

Faculty of Theology.—In granting degrees no test of belief imposed; qualification for degree of B.D. defined; theological teaching apart from University recognised, 406-417.

Recognition of extra-mural teaching.—Has been recognised for degrees in Medicine, 418, 419; difficulties as to its introduction in Faculty of Arts, and alternative of intra-mural teaching discussed, 420-427.

Length of University sessions.—Suggests change in winter session, 428-431; extension of summer session considered and discussed; objections—(1) that many students are teaching and otherwise employed during summer; and (2) that the long vacation attracts a higher class of professors; in Natural Science summer classes already exist; for the other departments, graduates of the University might be appointed lecturers to teach in summer; for degrees, two summer sessions to be held equivalent to one winter session, 427, 428.

With reference to election of Rector, suggestion that instead of present method of election of four nations, the students should vote individually, 432; also that those only should vote who attend more than one class, 433, 437.

Financial position of University.—Statement as to expenses for erection of new University buildings; proposals for transfer of charges on General Fund to Department of Works; reasons for opinion, 438; comparison between salaries of librarians in Glasgow and Edinburgh Universities, 438, 439; emoluments of professors in Glasgow discussed as regards Parliamentary grants, as compared with those of other Universities in Scotland, 441-444.

Libraries and museums.—Provisions for management of, 445-453.

CALDERWOOD, PROFESSOR, Edinburgh.—Has been Professor of Moral Philosophy in the University of Edinburgh since 1868, 7054, 7055.

Constitution and powers of University Court.—Is doubtful whether the power of appeal by Senate to University Court, under sub-section 1 of section 12 of Act of 1858, should be continued as one of the functions of the Court, and reasons for his opinion, 7056-7058; would suggest as an improvement, that all matters connected with teaching should be finally disposed of by the Senate, and be non-appealable to the Court; while the appeal should remain in all matters connected with administration and finance, 7059-7061; is in favour of increasing representation of General Council to the extent of at least two additional members in University Court, 7062, 7063; would make corresponding increase in representation of Senatus, if there is no limitation of the appeal; were the latter granted, no increase is necessary, 7064.

Functions of General Council.—Does not think more meetings are desirable; would rather be advisable to give the business committee, appointed under General Ordinance No. 3, 2d July 1860, power of dispensing with half-yearly meeting of Council, if there was no business to come before it, 7065-7070.

Course of study for Faculty of Arts.—Of the utmost consequence to retain as compulsory at least a class of each of the departments of Classics, Mathematics, and Philosophy, in the course of study for M.A. degree, 7071; thinks that course might be usefully widened by allowing an option for students to take in Science much more largely, 7072-7077; would allow this option to begin at the entrance examination for graduates, 7078, 7079.

Suggestion that publication of names of those who take ordinary pass examination for M.A. should be made in order of merit, instead of alphabetically, 7080.

Importance of some change from present arrangement for graduation in Arts; at present the time is restricted to that between the pass and the taking of the degree; would suggest that honours should be allowed to be taken within a period of two or three years after the student has passed his degree, 7080-7089.

In favour of some separate distinc-

tion, by diploma or otherwise, being granted, after two years' attendance, to teachers of primary and secondary schools, 7090, 7092-7096.

Against movement for an inferior degree, or degree of B.A., 7091, 7097, 7098; not in favour of an entrance examination for junior classes of Faculty of Arts, 7099-7106.

Extra-mural teaching for Arts Faculty.—Might be introduced on similar conditions to those under which it is admitted in the Faculty of Medicine, provided the endowments of the chairs were increased, 7107-7110.

Suggestion that if extra-mural teaching is to be sanctioned by the Court, the Senatus should have some supervision regarding the persons who are eligible, 7111; proposal that all men who have passed with honours should be eligible, and chosen as suitable, 7112-7116; would be a gain to the University if intra-mural auxiliary teaching were increased; witness, Professor Fraser, and Professor Mamon, are each allowed £40 for an assistant from the Senatus, but £100 would be required to secure what is needed, 7117-7128.

System of patronage in Edinburgh University.—Desirable there should be uniformity in mode of election of professors; obvious disadvantage in Crown patronage; uniformity would be better secured by some central body, to whom all appointments for Edinburgh, or for the four Universities, were entrusted, 7129-7136; alternatively, a curatorial body, representing partly the University and partly the city, 7137-7142.

Of opinion that the proposal that the Senatus (as at the University College, London) might be called upon for a reasoned report on merits of candidates would be practically unworkable, 7143.

The emoluments of witness' chair are about £600, 7144-7146.

Bursaries, mode of appointment to.—All bursaries should be thrown open to competition, 7147-7150; is against idea of giving bursaries on plea of poverty, except upon condition of passing a standard examination, 7151-7155.

University buildings.—Want of buildings much felt; three professors teach in witness' class-room, 7156, 7157.

CAMPBELL, PRINCIPAL, Aberdeen.—Has

been Principal of the University for twenty-one years, and was before the union Principal of King's College, 846-849.

Constitution and powers of the University Court.—Has no objection to the desire of the Council to have one additional representative in the Court, 850-852, 861.

Doubtful whether Senatus requires an additional representative, 858-855; considers there is a want in the Act or Ordinances in giving no rule for summoning meetings of the Court; practice in Aberdeen is for two members of Court to make requisition to the principal, who orders the clerk to call the meeting, 856.

Of opinion that present practice of admitting newspaper reporters to meetings of Court is objectionable, 856-859; difficulty in securing a quorum at meetings of the Court, the quorum being four out of six, 860, 861.

Election of Rector.—Does not approve of voting for Rector by present method of 'nations'; would rather institute vote by a general poll, as in Edinburgh, 862-866.

Functions of General Council.—Usually presides, as principal, at the meetings of the General Council; does not know of any important change that ought to be made in the functions of the General Council, 867, 868; the average attendance at meetings is about 50 or 60, out of 2200 members, 869-872; would not give the Council more power in dealing with University questions than it at present possesses, 873.

Course of study and graduation in Arts.—Thinks there should be more ways than one of attaining some academic stamp by a degree lower than the M.A. in Arts, and that this should be obtained by an extension in the subjects of study, and an increased variety in the ways of reaching some academic mark or degree, 874.

Views generally on this subject are,—that while in Universities certain branches in the course should be imperative for all, at a certain stage a man might have power to choose a curriculum more scientific, literary, or philosophical, as he pleased, by dividing the Faculty of Arts into divisions or sections; Faculty should also be enlarged by absorption of Sciences, such as Botany, Zoology, Mineralogy, and Geology, as at present in Medical

Faculty, 875, 936-939; branches which should be indispensable in every candidate for graduation are, Latin and Mathematics, and witness reluctantly (having been a professor of the language) surrenders Greek, 876-878, 925, 926; definition of proposed literary, philosophical, and scientific departments, with their curricula, 879-882.

Length of sessions.—Length of Aberdeen session nominally six months, but virtually five; proposal that, instead of winter and summer sessions in Universities, trimestral sessions of nine months in the year might be substituted, with a short recess every three months, 883-888, 1170.

Institution of entrance examinations.—Aberdeen has already a good practical examination for intrants in the bursary competitions, 889, 913; operation of Dick and Milne Bequests in parish schools of the north has resulted in a higher standard of teaching in the Classics in Aberdeen, 890-893; nearly all first year's students compete for bursaries, and of the whole number about one-half get bursaries, 894, 912, 936; effect of this entrance examination has been to raise standard of qualification in students coming up to University for first time, 913, 914.

Competitors for bursaries pass a preliminary examination before admission to the higher competitive examination, 915-920; at Aberdeen, practically no student comes up for his first year unless he has gone through the bursary examination, 921; if he did, would be below the standard of the class, and professor's teaching would be above his head, 922-924; competition examination includes certain questions prepared by the Scientific professors, such as in Botany, 927; some of the bursaries are restricted to lads not under fourteen or sixteen, but most of them are unrestricted as to age, 928; value of competition bursaries are from £10 upwards, and in some special cases, £35, £40, and £75; also a large number of bursaries under private patronage, 934, 935.

Is in favour of introducing an entrance examination where it does not exist, 940, 941.

Thinks reinstitution of B.A. degree a better stamp than B.Sc. or D.Sc., 942; proposed difference in qualifications of B.A. as compared with attainments required for M.A., 942-947; suggestion that degree of B.D. should

only be given to students in Divinity in five or more years after leaving college, on their writing a thesis or giving other proof of further study and attainment, 948-956.

No graduation in law in Aberdeen University, 957-959.

Condition of library.—Objects to proportion of grant received from Treasury as compensation from Stationers' Hall, when compared with what St. Andrews obtained, 961-963; accommodation sufficient, 964, 965; from General University Fund, library obtains about £575 annually, 966-968.

University buildings.—Are generally in good condition, but much want of a covered space for shelter to students between classes in winter and stormy weather, 969-971.

Extreme desirableness of Universities encouraging residence of students in common halls, as securing economy, social comfort, and improved means of tutorship and study, 1166, 1167.

Extra-mural teaching.—Aberdeen University have had repeated applications for recognition of teachers in Medicine, 971-974; would not be desirable to introduce the practice in the Faculty of Arts; if Faculty were extended to include Modern Languages, French and German might be taught extra-murally, but would object to introducing any special professorship, 975-981.

Emoluments and retiring allowances of professors.—Emoluments very inefficient as compared with other professional men, and, comparing one professor with another, incomes require to be equalized—poorer half should be raised to an average, removing such discrepancies as between £300 and £1200; £700 or £800 would not be too large a sum, 1165, 1169; thinks that the retiring allowances provided are not sufficient to induce the professors who ought to retire to accept of them; reasons for this opinion, 982-985; extremely desirable that the period entitling a professor to a retiring allowance should be calculated by the session instead of the year, 1012.

Mode of appointment to bursaries and scholarships.—Has no suggestion or objection to offer to competition bursaries as at Aberdeen, 986, 987.

Occasional difficulties arise in administering bursaries left by private patrons, from hampering conditions attached to the bequest, 988-990.

The principal and all the original professors of King's College have houses, but all who teach in King's College should have them; this would require five more, 991-994.

Museums.—The Professor of Natural History will soon require additional room for his museum, 995.

Regulations as to presenting and electing University officers.—Election of Rector (*see above*), 862-866; patronage of chairs of Divinity would be better in hands of some other body than the Crown; in Aberdeen should be lodged in the University Court, 997-1001; Divinity chairs ought to be restricted to members of the Church of Scotland, 1002-1009.

Question as to whether a University Council has a right to petition Parliament, 1010-1012.

New professorships.—Sees no occasion for additional chairs being created, 1167, 1168.

CAMPBELL, PROFESSOR, St. Andrews.—Is Professor of Greek in University of St. Andrews, and has been so since 1863, 6743, 6744.

Constitution and powers of University Court.—Has never been a member; has to suggest an addition of two members, a second assessor from Council and a second assessor from *Senatus*, 6745-6748; alternatively, instead of another elected member from *Senatus*, would be sufficient to make second principal *ex officio* a member of the Court, 6749-6752; number of Court would thus become eight, of which five should be made a quorum, 6753, 6754; such a Court would be a good elective body for election to chairs, 6755, 6756; undesirable that University Court should frequently exercise any initiative, 6757-6759; would have no objection to the Court being a court of inquiry, 6760.

Functions of General Council.—Would not desire any extension of their powers beyond sending another assessor to University Court; objects to influence of General Council in having assisted to restore Chemistry as a compulsory part of curriculum for Arts degree, 6763-6765.

Entrance examinations.—Would be unadvisable to make an examination a condition of entrance to the University; would prefer a compulsory examination for all who wish to enter upon a second year of study, and who intend to take a degree;

this should comprise the following subjects—(1) Latin, (2) Greek, (3) Arithmetic and Euclid, (4) English History and Literature, (5) one Natural Science, 6766; of opinion that a youth of average ability should, after passing through a burgh school, be able to pass this examination at the age of sixteen or seventeen; if secondary education was properly established, none would require to attend the junior classes; for those who had not had the training of an average middle-class school, the junior classes would be suitable until they could pass the preliminary second year's examination, 6767-6777.

Would not allow students below the age of sixteen years to enter the junior class, 6778; would place no restriction on persons of more advanced age or those entering as private students, 6779.

Course of study in Faculty of Arts.—Would lay down general principle of uniformity in first stage (or year), and divergence afterwards, 6780; would extend curriculum for M.A. over three years from preliminary examination, and have an examination at end of each year; first year's course of study described, 6781; examination at end of second year, subjects defined; this should, in the event of the B.A. being restored (to which witness is favourable), become the examination for this degree, 6782; B.A. to pass in four out of eleven optional subjects; list of these given; and to attend professors' lectures in three out of four of the subjects he professes, 6782, 6783; would make it necessary to pass in six of these subjects for M.A. degree; would make two distinct examinations, one for the pass or ordinary degree, and the other for honours; curriculum and rules for passing these two described, 6784-6790; proposal further discussed, 6791-6798.

Institution of new Faculties or degrees.—Considers that where not already existing, degrees in Science should be instituted, 6798\*; to make graduation in Science a reality in St. Andrews, would be necessary to found a branch of the University at Dundee; courses of lectures by Professors of Chemistry, Natural History, and Physiology in St. Andrews have already been given in Dundee with great success, both examinations and lectures being largely attended, 6798\*, 6802.

Plan of proposed Science School at

Dundee further discussed; some Scientific professors might require to be located in Dundee, 6808; conditions under which Science degrees should be granted, with outline of subjects and examination for B.Sc. and D.Sc., 6804-6809; question as to allowing matriculation to students attending Dundee lectures, 6810; suggests that classes both for Science and Arts should be open to both sexes equally, as in new University College at Bristol, 6811.

Creation of new professorships.—Speaking of University as it now exists, there should be a Professor of History; former Professor of History has become entirely a Professor of Natural History, 6811-6813; if a School of Science is created at Dundee, a chair of Experimental Physics or Mechanical Philosophy will be necessary; at Cambridge there are two such chairs, 6814; a lecturer on Political Economy would also be required at Dundee, 6815.

Assistance and apparatus for professors in Faculty of Arts.—Witness and other professors in St. Andrews have at present no assistants; thinks that in all Scotch Universities the teaching staff is too small; would propose that in Edinburgh and Glasgow each professor should have two assistants, and one should be given to each professor at St. Andrews, 6816; duties which should be assigned to such assistants, 6817, 6818; with regard to apparatus, maps, plans, drawings, and wall charts of various antiquities, would much assist Professors of Latin and Greek in the archaeological part of their teaching, 6818.

Length of University sessions.—Would not lengthen annual course of professorial teaching, 6819-6822.

Extra-mural teaching.—Objects to its introduction in Arts Faculty, and reasons for opinion, 6823-6827.

Regulations as to presenting and electing University officers.—Has to enter a strong remonstrance against continuance of private patronage at St. Andrews, 6828; difficulties in proceeding to abolish rights of private patrons, unless by way of compensation under such an Act as abolished patronage in the Church, 6829-6835.

Emoluments and retiring allowances of professors.—Much necessity for additional emoluments; difficulty as to channel through which these could be obtained; an increase of

fees might result through enlarging the number of open bursaries, and thus securing an increase of students, 6836; present number of students in University does not exceed 150, and it would cost little more trouble to teach, say, 250, 6837-6841.

Retiring allowances to professors.—Would propose that retiring allowance should begin at ten years, at the rate of one-thirtieth of the income, and reach the maximum in twenty years, instead of as at present in thirty years, 6842.

Mode of appointment to bursaries or fellowships.—At present rather more than one-half of the bursaries at St. Andrews are open, but is inclined to lay down a decided rule that all should be open to competition, 6843-6847; all bursars should be required to follow remodelled curriculum and take a degree, and no one should be eligible for a scholarship or fellowship who has not taken a degree, 6848-6850.

Financial position of University.—Case of St. Andrews is very hard in regard to teinds being made precarious by calls for arrears; thinks the percentage of five per cent. reserved from College funds for repairs is insufficient, 6851; have no Government grant for that purpose, 6852, 6853.

Condition of buildings.—Urgent requirement for extension of library, especially for a students' reading-room, 6854-6856; suggestion that a dining hall might be an advantageous addition to University buildings, and covered places for recreation, 6857, 6858.

Theological Faculty.—Proposal to set Faculty free altogether from trammels of subscription, and leave professorships open to whole world, discussed, 6859-6865.

CAMPBELL, RICHARD VARY.—A member of the Faculty of Advocates; admitted to the Bar in 1864; took degree of M.A. at Glasgow, with honours; afterwards took LL.B. degree in Edinburgh; and studied Law in Germany at Heidelberg, 8270-8274; is at present an Examiner in Law in University of Glasgow, 8275.

Course of study for graduation in Arts.—As a student felt the want of a chair of History; thinks one should be created, and the subject added to Arts curriculum as an optional subject in lieu of Mathematics, 8277-8281; at present, for the Law degree of LL.B.,

the study of History is already made compulsory, 8282, 8283; has to suggest that there should be a degree in Faculty of Law inferior to present one of LL.B. introduced into Glasgow, similar to that of B.L. created in Edinburgh University by Order in Council of 6th August 1874; in this, History should be a compulsory subject, 8283-8288; suggestions for regulations and privileges which should be attached to this degree; should like to see B.L. qualify for passing as a law agent under recent Law Agents Act; a student who has taken this degree at College might afterwards produce his diploma to the Court, and be admitted without further examination as a law agent; believes that all good students would take this degree, 8289, 8298, 8301.

Of great importance, by some such means, to keep legal profession connected with the Universities, 8289, 8304, 8310; would rather abolish present Board of Legal Examiners, and trust the examiners in the University, under supervision of the Court, to keep up proper standard, 8305-8314; considers examination for B.L. quite equal to that passed by a law agent before admission to profession, with exception, perhaps, of the examination in Court procedure; this might be added, with the necessity of its being actually taught in the University, 8290-8292.

Witness, as counsel for two Bachelors of Law (B.L.), applied by petition to one of the Lords Ordinary to get degree accepted, but the Court declined; on another occasion the court accepted LL.B. as qualifying, 8292-8295; Procurators Act of 1865 enacted, in section 11, that degree of B.L. should be accepted in lieu of entrance examination, and witness is of opinion that it must be by a mere omission this provision was not repeated in Law Agents Act of 1873, 8295, 8304; matter might be regulated in any University Act to follow this Commission, 8296; Faculty of Advocates will not accept B.L. as a qualification for admission; at present they accept LL.B., 8302, 8303.

Alternatively, would substitute LL.B., as title of junior degree, for that of B.L., and have LL.D. restored as an examination degree; the use of the LL.D. degree *honoris causa* should be discontinued, or, as in Queen's University of Ireland, at Dublin, and

in Oxford, should not interfere with the student proceeding from LL.B. to LL.D.; would make LL.B. an examination degree, and grant diploma of LL.D. at, say, twenty-five years of age, perhaps requiring a thesis, 8315-8321.

Creation of new professorships and lectureships.—Is satisfied with number of professorships in the Law Faculty, but thinks it very desirable to have a course of lectures on Mercantile Law, 8323; evidence of requirement in fact that the Juridical Society and the Bankers' Institute have each successfully had courses of special lectures on Law subjects, such as insurance, bankruptcy, etc., 8323-8328.

Extra-mural lectures.—Of opinion that in such subjects as Mercantile Law the principle of extra-mural teaching might be extended to the Faculty of Law, as is already done in the Medical Faculty; this has already been done to a limited extent; witness attended Dr. Littlejohn for Medical Jurisprudence, and had his lectures accepted as qualifying for LL.B., 8329, 8330.

Extra-mural lectures on Mercantile Law might take place of, say, forty lectures out of present requirement of eighty in Scots law, 8331-8344.

Constitution of General Council.—Suggestion that there should be a representative body of, say, fifty members, elected by the graduates, this body being united with the Senate, who might add the twenty or thirty professors to make a sort of lower house, retaining the University Court as an upper house; proposal discussed, 8345-8361.

CAMPBELL, REV. JAMES, D.D.—Is minister of parish of Balmerino, and M.A. and D.D. of St. Andrews University, 10,280-10,282; is a member of the General Council, 10,283.

Constitution and powers of University Court.—Of opinion that all the members of the General Council desire an increase of two more members in the Court, making their representation three in all, 10,284-10,291, 10,304; thinks proceedings of Court should be regularly laid before the Council; an abstract in the Calendar of the proceedings for the year might effect this, 10,292-10,296.

Functions of General Council.—Council should have power to call extraordinary meetings on a requisition to the Chancellor, giving the

latter a power of veto over the calling of the meeting, 10,297, 10,298, 10,300; Council should also have power to act through committees, 10,299, 10,305-10,308.

Institution of new Faculties or degrees.—Appears on behalf of General Council to represent propriety of reviving B.A. degree, 10,309-10,311, 10,369; witness' own reasons for its revival; it might be taken by intending teachers, and made a requisite for a teaching diploma; would further make the degree less difficult to obtain than formerly, 10,312, 10,316, 10,317.

Curriculum should be two years, if student passes examination for second year's class; otherwise, three years, 10,313-10,315.

Proposal further discussed, 10,319-10,324.

Would not make B.A.'s members of General Council, 10,325, 10,326.

Entrance examinations.—All should be examined at their entrance, excepting those young men who are poor, but of good intellect, and who have not had advantage of much previous education; these should have privilege of deferring their examination till the end of first session; the common run of students who cannot pass should be sent back to school for another year, 10,327-10,339.

Length of University sessions.—Thinks it would be better to begin session on 1st October, and end in middle of April, thus dividing session equally by Christmas holidays, and extend these to three weeks, 10,340-10,348.

Financial arrangements of University.—Has to propose (for St. Andrews) that a statement of whole revenues and expenditure of each University, including salaries and fees, should be annually laid before Council, 10,349-10,352.

Libraries.—Great want of a printed catalogue of University library, only one existing is forty or fifty years old; there is a MS. catalogue, not accessible to readers in general, 10,355-10,360; of opinion that printing of a catalogue should be paid for by Government, 10,361-10,364; members of Council are at present allowed use of four volumes at a time, thinks number should be increased to six, 10,353; at present the Library Committee is a Committee of the Senatus; thinks one of the members should be chosen by the General Council from among those of its own members who are not

members of Senatus, 10,354, 10,355; members of Council pay 10s. 6d. per annum, or five guineas once for all, for use of library, 10,365; would be very desirable that members of any General Council of a Scottish University were allowed to read from University library nearest them, 10,366, 10,367.

CHARTERIS, PROFESSOR, D.D., Edinburgh.—Is Professor of Biblical Criticism in the University of Edinburgh, and was appointed in 1868, 7606, 7607; is a member of the General Council, and a graduate of Edinburgh both in Arts and Divinity, 7608, 7609.

Regulations and course of study for Faculties.—Witness looks at the regulations in Faculty of Arts chiefly in the light of the Theological Hall; thinks it would be a great advantage to increase the departments for M.A. degree to five or six, making choice of a certain number to be fixed optionally, and thus enable the student to cultivate any of them as a specialty, instead of as at present being confined to an average of all departments, 7610; with a view to shorten curriculum for Divinity students, a class of Hebrew and Biblical Criticism might be placed among alternative departments for M.A., 7639, 7640-7643; would make no one class imperative in Faculty of Arts, but require attendance for, say two sessions, after which would not compel student to attend classes the work of which he already knew, or for which he had no particular bent, 7611.

Entrance examinations.—Would have entrance examinations for all students on entering the University, so constructed with different grades that while a certain minimum must be attained by a student to secure entrance to University at all, the passing in a higher grade would absolve him from those classes which he was proved already to know, 7612, 7613; entrance examinations at present confined to Classics and Mathematics; witness would have instead an examination in all the classes, 7618, 7619; possibility of supply of secondary education being found to prepare intending students for such an entrance examination discussed, 7620, 7621; at present professorial assistants take the place of the secondary schools, 7622, 7626.

Of opinion that seven years is too long to require students in Theological Faculty to spend in the University



before he can take the B.D. degree, and that both degrees, M.A. and B.D., might be made attainable after three or four years' attendance, and would give no man any degree unless he had been a student for three or four years; would not allow B.D. to be given without M.A. being previously attained, 7614-7617; tendency of seven years' attendance to deter many from becoming candidates for the ministry, 7623, 7624; would object to meritorious students from the country being admitted to lower classes and examined at end of first year, 7625; objects to the elementary work at present done by the Universities in the summer classes conducted by the tutors, as not lying within the functions of a University at all, 7627, 7628.

New professorships or lectureships. — Would be an improvement if chair of Biblical Criticism were divided into three—Old Testament Criticism, New Testament Criticism, and Biblical Archaeology, 7629, 7630; Theological Faculties would be very much more efficient, if there were, instead of four, eight chairs, 7631.

Appointment of University officers. — Would venture to say that if patronage of the Divinity chairs were given to the Church of Scotland, the Church would come forward and endow new chairs, 7632, 7654; would vest such patronage in certain delegates, chosen on the principle of representation, 7633.

Length of University sessions. — Thinks a summer session must be introduced in all the Faculties, 7636-7638.

Extra-mural teaching. — Would recognise extra-professorial teaching, whether extra-mural or intra-mural, in every Faculty and every class, 7644.

Emoluments and retiring allowances of professors. — The last Commission stated that incomes of Theological professors were small, but witness is of opinion that they are now relatively much less than they were then; all the successful ministers in a University town are drawing much larger incomes than the Theological professors can possibly have, 7650-7652; the professors in the United Presbyterian Church are to be better paid than those in the University, each of them getting £700.

Mode of appointment to bursaries and fellowships. — The Theological

Faculty last year asked witness to represent that it would be better if Theological bursaries were open to all Theological students, and if a previous degree of M.A. were not required, 7655-7661; thinks all bursaries should be given by competition in all the Faculties, 7662-7666.

University buildings. — There should be a reading-room for miscellaneous periodicals for the use of the students, 7667-7670; great want of water-closet and lavatory accommodation; no provision of any kind exists for the 2300 men who attend the University; the want of them leads to both physical and moral evils; has known men who took opium to make them able to attend for a day, while others seek for conveniences in neighbouring public-houses, 7671, 7672.

CHRISTIE, REV. DR., Aberdeen University.

—Is minister of Kilrenny in Fifeshire, and has been for four years representative of the General Council in the University Court of Aberdeen, 4584-4586; has during that time constantly attended meetings of the Court, and occasionally those of the Council, 4587-4589.

Constitution and powers of University Court. — Thinks the Council might be profitably represented by at least another member in the Court; this is a general desire of the graduates, 4590-4594; occasionally there is a difficulty of securing a quorum, which, in opinion of witness, would be rectified by the appointment of another member, 4595-4597.

Regulations as to presenting and electing University officers. — The University of Aberdeen has the patronage of five chairs, and witness is of opinion it is well constituted for exercising such patronage, 4598-4601; has nothing to suggest with reference to the powers of the Court, considering it sufficiently efficient, 4602.

Functions of General Council. — Does not see any occasion for changing the functions of General Council in any important matter, 4603-4611.

Regulations for graduation in Arts. — Would enlarge subjects of study in Arts; all subjects of Science and Literature should be taught; and considers it necessary to allow students an option in regard to the subjects that they study, 4612-4615; would suggest there should be four groups of

subjects of study, and that attendance and examination in three of these should qualify for graduation in Arts, 4616; as additional subjects, would introduce Modern Languages, to do which, would not impose so much attendance on the two Classical Languages which at present occupy so much of the student's time, 4617-4619; in study of Natural Science, would introduce as new, Chemistry and Botany, for which present teaching power of University is sufficient, 4620, 4621; the General Council, in their last opinion on a report presented by witness, proposed to institute a B.A. or inferior degree, the subjects for which were to be—(1) English Literature and a group of languages, Latin, French, and German, eliminating Greek, (2) Mathematics and Natural Philosophy, (3) Logic and Moral Philosophy, (4) Natural History, Chemistry, and Physiology or Botany; of these groups, the candidate to be required to take up any three out of the four, the Languages being made imperative, 4622-4626; proposal discussed, 4638-4648; witness' own opinion is adverse to this proposal, as tending rather to diminish than to enlarge University studies, and would rather encourage students by giving them considerable liberty in regard to the subjects of their study for M.A. degree; another objection to introduction of a new curriculum was discovered by Senatus on obtaining opinion of counsel, to effect that as a general rule bursaries could not be so applied, 4627-4629; probably B.A. degree might be a better test as a preliminary examination for Medical or Theological study than the present entrance examination, 4630-4636; the M.A. degree is taken by a good many students of Medicine, and by the majority of the Theological students, 4649-4652; doubtful as to whether M.A. degree should be made imperative upon all students of Divinity, 4653; for M.A. degree would make Latin imperative, and Greek optional, 4654-4657; for acquirement of Modern Languages, thinks there should be a licensed teacher, and would approve of extra-mural teaching of these within certain limits; proficiency should exceed mere conversational facility, 4658-4662.

Entrance examinations.—The want of entrance examinations has not been felt in Aberdeen, in consequence of

those required for public competition for bursaries at the beginning of each session, 4633, 4664; how competition is conducted, 4655-4671.

New professorships.—Not prepared to speak on this subject, further than to state that if new subjects are introduced, additional professorships would be extremely desirable, 4672; impossible for Aberdeen to compete with Edinburgh in the number of subjects it can teach, 4673.

Extra-mural teaching.—Recognised in Medical Faculty, and of opinion that it might be extended, in a modified degree, to Faculty of Arts, 4674-4676; doubtful if extra-mural teaching is equal in its influences, by rivalry and otherwise, with University culture, 4677.

Ability of extra-mural teachers in Aberdeen to compete with professorial teaching, 4678-4682.

Length of University sessions.—Does not advocate any particular change, 4683, 4684.

Mode of appointment to bursaries.—Is in favour of bursaries being obtained by competition, 4685-4687; of opinion that it is desirable that for some purposes some bursaries might remain as presentation bursaries, 4688.

CHRISTISON, PROFESSOR SIR R., Edinburgh.—Has been for more than half a century a professor in the University of Edinburgh; is at present Professor of Materia Medica, and was formerly Professor of Medical Jurisprudence, 454, 455; has been a member of the University Court from its establishment; is also a member of the Senatus and of the General Council, 456-459.

The progress of Edinburgh University has during the last fifteen years been very remarkable in all respects, 459, 460.

Constitution and powers of University Court.—Has been throughout the representative of the Senatus in the Court, and for first few years acted as secretary to the Court, 461, 462; the meetings of the Court amount to about a dozen every year; thinks constitution of Court would be improved by granting the addition of another member from the General Council; this addition would prevent difficulty occasionally arising in getting a quorum; present number of the Court is eight, and the quorum five, which is much too great; four out of nine would be almost secure, 463-466, 474; it is par-

ticularly necessary to have it arranged that the appointments of the assessors of the Chancellor and Rector should, in the event of either of the latter going out of office, continue till their successors are appointed, 467-470; does not consider it necessary to increase representation of Senate, 471-473.

Calls attention of Commission to the doubt which has arisen regarding the meaning of the words of sub-section 1 of section 12 of the Act, as to whether the Court has a power of review *ex proprio motu*, and thinks that if the Court is entitled to review every Act of the *Senatus ex proprio motu*, it would be proper, to avoid all ambiguity, to say 'both of review and appeal,' 475, 476; cases showing reasons for having this power of review, 477-481; points out a defect in present University constitution in there being no means of correcting any of the Universities committing a violation of the Ordinances, and of the Act, except in a Court of law, 482; suggests as a remedy a provision in an Act of Parliament giving a right of complaint to one University against another, such complaint to be addressed, in the first instance, to the Queen in Council, and thence remitted to the members of the Privy Council who reside in Scotland or Edinburgh, with power to them to decide and visit if necessary, 483-485; discussion of proposal, 488-490; would deprecate investigation by the Privy Council in London, where the University appears by counsel; the only case of the kind which has occurred cost Edinburgh £700, 486, 487.

Thinks that the University Court, which has authority over the application of the funds of the University, should have power of granting to the *Senatus* the privilege of absolutely voting small sums up to a certain amount, 491; would rather not specify a limit, but leave that to the Commission to determine, 492; on the other hand, some members have held that if the Court wants to spend a small sum on their own expenses, they are obliged to apply to the *Senatus*; witness does not coincide with this opinion, but thinks the question should be settled; the University funds are in the hands of the Senate, except in such a case as the Baxter Bequest, which is left to the direct care of the Court, 493-496.

Functions of General Council.—

Except by granting an additional representative, does not think its functions ought to be increased by giving it any influence over the executive of the University beyond what it now possesses, and reasons for this opinion, 497, 498, 500, 514-518; would limit power of Council to that of making representations and recommendations to the University as it is just now, 499-501.

Thinks that power of adjournment might be granted if for one day only, 506, 507; average attendance at meetings about fifty persons, 508-513, 515; proposal by a committee that the number of meetings should be increased, opinion of witness that the present two statutory meetings are enough, 502-505.

Institution of entrance examinations in Faculty of Arts.—Thinks it would be of service, but at first the examination must be very tender and slight, and introduced gradually, and that for a long time there must be many exceptions allowed on account of present condition of our secondary and grammar schools, which are not numerous enough throughout the country to meet such an examination, 519, 525, 526, 541.

Considers that the kind of examination to be introduced in the meantime should be left very much to the Faculty of Arts to decide, 520, 521; assuming secondary schools to become numerous enough, is of opinion that the examination should then become a medium standard up to which boys attending these schools should be educated, and not in the shape of a competitive examination, 522-524, 527, 528.

Course of study and regulations for graduation in Arts.—Thinks it would be of importance to have the double degree in Arts of the English Universities, the degrees of B.A. and M.A., making the qualifications for the Bachelorship less than for the Mastership, and that the Natural Sciences should be introduced as well as Physical Science, which is already admitted; Chemistry, Botany, Mineralogy, and Geology, should be introduced as part of the course, with an option to the students to divaricate into one branch or another, after studying certain imperative subjects, these latter to be Latin, Greek, Mathematics, and English Literature; on passing these, the candidate should be allowed

to choose a higher examination in Classics, or in Philosophy, or in Mathematics and Physics, or in branches of Natural History; of opinion that there should be attendance upon all classes in which there is to be an examination, 529-533, 536, 565, 566; probable effect of this change in Arts curriculum, on increased study of Science by students for Theological Faculty, 536.

There would thus be a distinct tripos, as in Oxford, with half a dozen different schools out of which a man might select for his degree, 567.

Question whether Greek being required for B.A. and not for M.B., the Medical student might not be deterred from trying for B.A. degree, discussed, 537; belief of witness that a great number of candidates for M.B. already do take Greek; quotation from a letter to the secretary to the Commission of 23d June 1876, from witness, showing the number for the last four-and-a-half years who professed Greek at their preliminary examination, 538, 541.

Would certainly not give option in subjects of Latin or Greek, even at the sacrifice of a knowledge of French and German; is of opinion that there is no subject so appropriate for the training of the mind between the ages of eight and fourteen or fifteen, as the study of Greek, 543-549, 568-572.

Expediency of instituting new degrees.—Of opinion that there should be degree of B.A., 550-552; qualification should be something under that required at present for M.A., and the M.A. should have its qualification greatly raised, 553-559; advantages expected from renewing degree of B.A., 560; proportion of Arts students who take degree in Edinburgh is about 70 in 700 students a year, 561-564.

Recognition of extra-mural teaching.—Is rather in favour of the introduction of the system in Faculty of Arts, provided the salaries of the professors were materially raised; would limit the extra-academic teachers to graduates of the University, and at first to those living at University seats; hitherto the system has worked well in the Faculty of Medicine, in which it has been in operation for at least thirty years, 573-583.

Creation of new professorships or lectureships.—Does not think there

is any necessity for additional professorships in the Faculty of Medicine at present, but there may be a question whether the institution of lectureships, attached to the University, not permanent, might not be desirable, on special branches, such as Ophthalmic Surgery, Dental Surgery, or Diseases of the Ear, if there happened to be any skilled specialist in Edinburgh in any of these subjects, the attendance on these lectures to be optional, and accommodation furnished for them within the University, 583-587.

Calls attention to the fact that the Senatus did at one time, in the middle of last century, exercise the power of instituting lectureships, and twice appointed a lecturer on French; worth consideration whether this power might not now be exercised by Senatus, with control of the University Court, 584.

In regard to constitution of witness' own chair (*Materia Medica*), feels that it is not in a satisfactory condition, especially with regard to teaching of its two branches of Pharmacy and Therapeutics; at present these are taught together; of opinion that, as in all the Continental schools, branches should be taught in separate courses—Pharmacy in the summer session, and Therapeutics in the winter one; witness brought this matter before the Medical Council in London, and Dr. Harvey, of Aberdeen, has established such a system, and has found it to be of great importance; believes the Medical Faculty are agreed in thinking it would be a desirable change; Pharmacy should be taken for examination in an early stage, and Therapeutics in the very last and final examination; importance and value of such a change discussed, 587-590; has no other change to suggest in Medical Faculty, the other chairs being well organized, and work exceedingly well, 591.

Emoluments of professors.—Thinks that the Medical professors should receive larger salaries, except in the case of the chairs recently founded, 592; of opinion that if salaries of Medical professors were increased, the University should be opened up so that three years might be taken extra-academically, and only one year of University study left imperative to be passed at the seat of the University where the degree is given, 630-635.

Condition of University buildings.—Much want of space for practical teaching; witness has no place where he can teach practically; there are two laboratories, but they are far too small, 593; a paper given in (a memorial to Government) by Sir Alexander Grant practically exhausts the subject of necessity for additional accommodation, 594–596.

The huge development of practical teaching which has taken place in the last fifty years renders it desirable that the professors should be provided with more and better assistants than they can now obtain; the salaries of the present assistants to the Medical professors are not such as in every instance to secure an assistant of sufficient qualification, or to retain their services for any length of time; present method of paying assistants tends to lower value of professors' income, 597–608.

University also very badly provided with material and apparatus, expense of which is very great, especially in Chemistry, to a certain extent in Materia Medica and in Anatomy; the fortunate increase of students and graduates in recent years has helped to meet these expenses, but of opinion that limit of assistance from this source has been reached, and that some means must be found of increasing the University fund; sees no means available except an increase of the matriculation fee, unless a grant is got from Government for the purpose, 609–615.

Of opinion that the examinations in the Medical Faculty are at present too numerous; there are now three, at three different stages of the curriculum; and at a late meeting of the Senatus some of the Medical Faculty thought a fourth might be added; to the latter proposal witness is strongly opposed; suggests to substitute for the examination of a number of subjects *in cumulo*, a pass examination at the end of a student's attendance on each class, and a pass examination at the end of the course, to be carried on by the extra-academical examiner of the branch as well as the professor, 616–626, 630.

Is well satisfied with the body of examiners as they now stand, 627.

Length of University sessions.—With reference to Medical Faculty, thinks that instead of present sessions

of five months and three months, with an interval of one month between, it would be an improvement if the courses were divided into two equal courses of four months each, with an interval of one month between them, 628–630, 677, 678.

Mode of appointment to scholarships and bursaries.—Thinks that with reference to minute bursaries, an endeavour should be made to reduce their number, and let every bursar hold several, so as to increase each bursary to not less than £20 to £25 a year; further, that an arrangement should be made by which competitive examination for all bursaries should be imperative; wishes founders would learn that little or no good is done by confining bursaries to a single parish; further, doubts whether University is entitled to examine such student, and if the certificate of his schoolmaster is not sufficient; thinks University should not receive bursaries with limitations as to parishes and special names, 636–639; has no objection to a preference given to counties, 640, 641; towards patrons objecting to competitive examination for bursaries in their gift, a little tender compulsion should be exercised by the Legislature, 642, 643; alternatively, for latter class, would be content with a pass examination where patrons objected to competition, 644.

Administration of University revenues, etc.—Difficulty of getting small sums invested, restrictions being placed upon trustees by confining their investments to heritable bonds, Bank of England stock, or in the purchase of land, 644–648; doubt whether, in case of funds invested by authority of original donors in bank stock, the trustees would not, in the event of loss, be answerable, 649, 650; detailed statement of financial position of University to be furnished for information of Commissioners, 651, 652; total income of University very small; surprise expressed by Mr. Gladstone, when Rector, that so much had been done by Scotch Universities with their small means, 653, 654.

Natural History Museum.—Unsatisfactory relations of the University to the Museum of Science and Art; according to the most recent report of the Department of the Privy Council, there is an arrangement, not yet

in action, to the effect that the University should have no use at all of the Museum by its professors, the last proposed arrangement being to pay off the University with £300, to get a duplicate collection in Natural History; the sum is not sufficient to restore the glass cases torn down, witness thinks quite illegally, and transferred for temporary use to the Museum of Science and Art, 654; discussion of the subject, 655-670.

Library.—Is under good management, but there is the usual want of funds to buy costly books in Botany and Natural History, 671-675.

CHRISTISON, JOHN, W.S.—Is a Writer to the Signet, and a member of the University Court; has been for eleven years secretary to the Court, and has attended all their meetings, 4994-4997.

Constitution and powers of University Court.—Some difficulties in administration have arisen: first, as to the Court holding property; the bequest by the late Sir David Baxter for the further endowment of the Arts Faculty having been left to the management of the Court, a question arose as to how the title was to be taken and the fund held; on opinion of counsel, the fund was invested in favour of the University Court, the members of the same in office at the time by name, and their successors in office; counsel having suggested possibility of difficulty in regard to transfers at some future time, witness has to suggest the question, whether any facilities could be provided for carrying out transfers in future; and would further propose, that some provision might be made for the Court executing deeds simply by a quorum, 4998, 4999, 5002; bequests are generally left to the 'University and to the Senatus Academicus thereof;' being so left, witness is of opinion that such bequests would fall under the administration of the Senatus, 5000, 5001; in the foundation of new chairs, the University Court have had a difficulty in knowing whether they or the Senatus had the right to act; two instances have occurred, one the case of the new chair of Commercial and Political Economy, in which the Court and the Senatus acted together through a joint-committee; in the other (the recently endowed chair of Education), the draft of the deed was adjusted by

the Senatus, and then sent to the Court for their approval, which was given, reserving all rights, 5003-5005; Court have not had any occasion to act under 5th sub-section of section 12 of the Universities Act, in the way of suspending or censuring a professor; but there have been one or two cases under sub-section 5 before the Court, which might have so resulted, 5006-5008; witness has no recollection of any difficulty having arisen in the Court in discriminating between the power of effecting improvements on internal arrangements of University, under sub-section 2 of section 12, and the 19th section, having reference to the power of altering Ordinances under certain conditions, 5009-5012; list of number of matters which have been the subject of regulation under the powers of the 12th section, 5013-5016, 5125; professors, on resigning office on a retiring allowance, must do so through the University Court, under the Act of 1858 and Ordinance No. 9; but in two cases of voluntary resignation, one did so by letter to the Senatus, and the other by letter to the University Court, 5017-5019; advisable that matter should be settled one way or other, 5020-5022; a difficulty arose in finding sufficient remuneration for a substitute to teach during the vacancy of a professor, the salary having dropped; a sum in supplement was granted from University funds; of opinion that proper remedy would be to have the salary made available to necessary extent during the vacancy, 5023, 5024; Court have carried out a considerable number of alterations under section 19 in altering Ordinances, 5025; usual process pursued in doing so described, 5026-5033; no provision is made for reprinting altered Ordinances, this is a defect, 5034-5036; no authentic print of the Ordinances exists other than what is contained in the Report of the Commission of 1858; thinks it would be very useful to have them reprinted, so far as necessary to embrace any alterations made upon them, 5037, 5038; any alteration is always communicated to the other Universities, but they in return do not always do so to Edinburgh, 5039, 5040; the Privy Council have of late advised other Universities of any change, and so long as the system is continued, each will know of any change, 5041, 5042; but supposing any University

infringes an Ordinance, there is no other method at present than an action at law; a better remedy than this would be an appeal to the Privy Council, 5043, 5044; should not say that such appeal is either dilatory or expensive, if the appeal be unopposed, 5045, 5046; advantages of this method further discussed, 5047-5056; as to function of the University Court to signify their approval or disapproval of assistants to professors, they take them on the recommendation of the professors, 5057-5060; on the whole, witness would transfer that function from the Court to the Senatus, 5061; under 4th sub-section of 6th section of Ordinance No. 8, one of the functions of the Court is to recognise the teaching of extra-mural lecturers, 5062-5068; this rule is different from that adopted with reference to extra-academical lecturers for degree of Science, in fact it is the reverse, 5069-5071; difference of opinion exists as to whether the membership in General Council of members of Court and Senatus exists after their membership in the Court and Senatus ceases; decision has hitherto been against continuance of such membership in Edinburgh, 5072, 5073; the decision of the University Court of Glasgow was to an opposite effect, 5074, 5075; these points of registration should be settled one way or other, 5076, 5077; difficulties in procuring a quorum have arisen twice in seventeen years; a remedy might to some extent be found by authorizing Chancellor's and Rector's assessors to hold office until new Chancellor or Rector is appointed, 5078-5081; alternatively, same effect might be secured by adding members to Court, or by reducing number of quorum to four, 5082-5086; definition of office of registrar, 5087-5093; how it is ascertained when a change of residence occurs, or as to the death of a member, 5094-5097; suggestion that an annual test by letters, and judging of returned letters, might be used as judging of the correctness of the register, considered, 5098, 5099; the expenses of the University Court are provided for by Ordinance, and the general fund is under the administration of the Senatus, 5100, 5101; possibility of a conflict between the two bodies has occurred, and such a condition considered, 5102-5112; witness' father (Professor Sir R. Christison)

held office of secretary of University Court from constitution of Court till 1865, but the duties of member of Court as well as secretary becoming too much for him, witness succeeded him, 5113; the average meetings of the University Court are ten per annum, 5114-5116; meetings are usually summoned by the principal, but a meeting may be called by any two members of the Court, or under instruction of the Rector when he is resident, 5117-5119; the only steps taken by the Court to secure fulfilment of sub-section 3 of section 12 as to teaching of professors, is to require that certain class returns are sent in, 5120-5122; specimens of such completed returns, as furnished to University Court, produced and put in by witness, 5123, 5124.

COATS, JOSEPH, M.D.—Is lecturer on Pathology in the Western Infirmary, Glasgow, and has been so for two years; was previously Pathologist in Royal Infirmary from October 1869, and is a Doctor of Medicine of University of Glasgow, 8191-8194.

Course of study and regulations for graduation in Faculty of Medicine.—Thinks there should be an alteration in course of study in respect of Pathological Anatomy, 8196-8198; no professorship of Pathology at present in Glasgow; one ought to be established, not of General Pathology, but of Pathological Anatomy; difference between these two, and reasons for opinion explained, 8199-8206; only instruction in Pathology available in Glasgow at present is that furnished in the Western Infirmary and the Royal Infirmary, 8207, 8208; if a professor were appointed, would be necessary for the Commission to make arrangements with the Western Infirmary to connect such professor with the infirmary, by having rooms in which to lecture, and means of finding subjects for his demonstrations, 8238, 8239; would not do away with the Pathologist of the infirmary, 8240; alternative solution of difficulty might be to appoint the Pathologist of the infirmary assistant to the professor, by virtue of the office of the former, 8241-8243, 8258-8260; or an assistant might otherwise be found for, say, £50 per annum, 8257, 8261-8263.

Present Clinical lectures of the Professors of Medicine and Surgery are

delivered in the Western Infirmary, not in virtue of their being professors, but because they are at the same time physicians and surgeons to the infirmary, 8244-8250; thinks it desirable that the Clinical Professors and Professors of Surgery and Medicine should possess an official connection with the hospital, 8251; necessity for, and sort of apparatus required for proposed chair of Pathology, 8257, 8264-8269.

With reference to preliminary examination, would desire that before student commences his studies in the Medical Faculty, he should have received his instruction, either in the University or by a recognised extra-mural teacher, in Experimental Physics, in Botany, and in Chemistry; these to be compulsory, and attendance on classes indispensable; and that these should be compulsory subjects in the preliminary examination, and probably some of the other subjects at present compulsory might be made optional; is not prepared to define what these options should be, but is inclined to give more weight to proficiency in Greek and the Modern Languages than to Logic, Moral Philosophy, or the higher Mathematics, 8213-8236.

Regulations for graduation.—The third examination is in General Pathology, as it at present stands; would substitute for that Pathological Anatomy, 8208-8212.

COSTELLOE, BENJAMIN F. C.—Is a Master of Arts of the University of Glasgow, and the holder of an Eglinton fellowship, 11,854, 11,855.

Desires to speak on behalf of a number of graduates in Arts, who forwarded a memorial representing their views on various subjects, 11,856-11,858.

Fellowships; scholarships, and bursaries.—Of opinion that existing and future endowments should be classified; all endowments for which graduation is necessary classed as fellowships, and those received on entrance classed as bursaries; intermediate prizes and endowments to remain out of classification; bursaries should, as far as practical, be made entirely open to competition, without any preference being given to name, trade, or religion, but restrictions to particular districts and schools should be left as they are, 11,859-11,861; all fellow-

ships should be open only to Masters of Arts with honours, all restrictions of birth, religion, or any other kind being abolished; all such fellows should have an opportunity of doing teaching work in the University, receiving fair remuneration, but not to be required to act as an ordinary professor's assistant; fellows, especially those in receipt of £100 per annum or over, should be bound to deliver a course of independent lectures on some subject within the degree course, subject to the approval of the Senate; for example, a Classical fellow, having obtained Senate's sanction to lecture on certain of the M.A. pass or honours books, might, after a year or two's absence from College to complete his study of them, return, and be allowed, within the University, to teach a class from the overflow of the present professorial classes, now notoriously too large for efficient teaching, 11,862; would make attendance on these classes qualify for graduation; and fellows should teach at same fees as professors, to prevent undue competition, 11,863, 11,864; those who had opened classes with sufficient success should have liberty to continue them after their tenure of fellowship, 11,865-11,867; an honours graduate in Natural Science is at present conducting a class in Mineralogy, under sanction of the Senate, very much on the principle here proposed, 11,868, 11,869.

The Snell exhibition.—Opinion that the exhibition ought to be increased from £110 a year to £150, by reducing the present number of fourteen, in the course of five years, to ten; £110 is not enough to keep a man at Oxford, and Snell exhibitioners are not eligible, by a regulation of Balliol, of which they are obliged to be members, for scholarships at Oxford, 11,871-11,879; this exhibition does not now attract Scottish students to Oxford as it was intended to do, because scholars and fellows at Scotch Universities, eligible for exhibitions and scholarships at Oxford, can always get much larger amounts of money; a list of some of the latter, 11,880-11,882; has to propose that, for the purpose of conducting fellows' classes, past Snells should rank as fellows as soon as they have taken their English B.A., and that the present restriction to students born in Scotland or of Scottish parents



should be removed; the latter provision having in two recent cases, one of them witness' own, and another, excluded competitors, 11,883-11,885.

Entrance examinations.—Are absolutely required, and should be instituted at once; might begin with an almost nominal examination of a low standard, and gradually rise so as to reach a fair maximum in ten years; little hardship would in this way be felt, because secondary schools could furnish education required; for the remaining cases, fellows' classes might take place of the present junior Latin, Greek, and Mathematics, their pupils not being matriculated till they passed the matriculation examination; the students strongly feel that the teaching of junior Latin and Greek within the University is very detrimental, as tending increasingly to bring up a class of boys who ought to be at school, 11,886-11,894.

Graduation and course of study in Arts.—Would revive B.A. degree, to be taken in three years with, say two departments of the pass M.A.; disposed to say that either Classics or Philosophy should be one of the two; for the pass M.A., in addition to the departments at present in use, those of History and Science might be included; after taking B.A. degree, student might proceed either to his pass or his honours M.A. in a special subject, 11,895; strong feeling among students that compulsory Mathematical pass in M.A. degree prevents a large number of otherwise able men from graduating at all; would desire that Mathematics should be made optional, 11,896; further proposed that in the honours M.A. there should be three classes instead of two; a section of the memorialists wish to state their belief that a large number of students have of recent years been injured by overwork in competing for class prizes; would suggest as a remedy a classification into three sections, as in the Medical classes, 11,896-11,899; personally, witness differs from this view, believing that stimulus of class prizes does good, 11,900, 11,901.

Election of Rector.—Was in University for five years, and has taken part in three rectorial elections; would strongly object to abolition of student constituencies; is disposed to suggest the abolition of

election by nations, and substitution of a general poll and election by an actual majority of the students, 11,902-11,910; discussion of the two systems of election, and probable effects of adopting a general poll, 11,911-11,938.

CROMBIE, REV. PROFESSOR, D.D.—Is Professor of Divinity and Biblical Criticism in St. Mary's College, St. Andrews; was appointed in 1868, 3513, 3514.

Has never been a member of the University Court, 3515; is a member of the General Council, and attends its meetings, 3516, 3517.

Constitution and powers of University Court.—Thinks it desirable to increase number of members to seven or eight; if increased to eight members, would make quorum six; if to seven, five might be quorum; would give an additional representative to Council, under restriction that additional assessor should be elected from among non-medical members of constituency, 3518-3524; proposal further discussed, 3533-3539; of opinion that such a Court of seven members would be sufficient, 3525; would object to second principal having a seat in the Court, but would prefer that the principals should be alternately members for a period of years, 3526-3529; considers it undesirable, and an anomaly, that the smallest University should have two principals; would combine the two Colleges, but admits there would be a difficulty regarding the property, which is held separately, 3530-3532; desirability of having some legal element in the constitution of the Court, questions of a legal nature frequently coming before them; case in point given; witness has heard of the value of services rendered by two former legal members of the Court, Lord Jerviswoode and Mr. Skelton, 3540, 3541; thinks that patronage of chairs at present in the hands of the University Court should be transferred to a Curatorial Court, composed of representatives of the University Courts and gentlemen nominated by the Crown, as being a body more independent of local influences, 3542, 3544-3549; chairs at present in the patronage of the Court, and those in the hands of private patrons, 3543; considers that in management of University affairs, Court might sometimes have interfered with ad-

vantage, where it has not done so, as, for example, in allowing an inefficient professor to retain office for a considerable time, 3550-3553.

**Functions of General Council.**—Would give Council power of delegating business to a committee, which committee might meet between one meeting of Council and another, to transact business and make representations to the Crown in the name of the Council; at present there is a doubt as to legality of exercising such powers, which should be removed, 3554, 3555; further thinks it desirable that Council should have a veto on all important changes in the curriculum of study, and manner in which such should be used, 3556-3567.

**Course of study and regulations for graduation.**—In Faculty of Arts, thinks B.A. might be with advantage restored, but would modify the examination so as to enable any student of moderate diligence to take it, 3568, 3574; degree should embrace all branches of the curriculum, in short, it would represent an inferior M.A.; would make B.A.'s members of General Council, 3577; would have M.A. degree to mark a higher degree of attainment than at present, and would give candidate a choice of several parallel courses of study; also thinks that the examining body for this degree should be the same for all Universities, and so represent one standard of attainments; would constitute such an examining board by selecting so many professors from each University, and would have the same arrangements as to course of study, books, and examination papers, 3569-3572; M.A. degree would indicate high attainments in some particular line of study, as Classics, Modern History, Philosophy, or Science, 3576, 3587.

Would allow student who has taken B.A. to go on to M.A. either after an interval of six months, or immediately after passing B.A., 3573-3576.

**Institution of entrance examinations.**—Of opinion such examinations should be introduced gradually; present standard of first year to commence with, then in two or three years an advance might be made, until the maximum was reached; junior Latin, Greek, and Mathematics should be excluded from curriculum;

scheme brought before a committee of the General Council by witness for an examination board, to be constituted out of three elements, viz. from the Universities, from the professors, from the masters of high-class secondary schools, and of elementary schools if known to be men of ability, to be appointed by General Council; this board should examine all entrants, 3578, 3579; in order to increase candidates for B.D. degree from Dissenting Colleges, is of opinion that if University Court appointed one or two professors belonging to Free or United Presbyterian Churches to act with the Divinity professors as examiners, many more Dissenting students would present themselves, 3579.

Rules made at St. Andrews with a view to make degree of D.D. promote theological learning; also as to custom of conferring this degree *honoris causa*, 3579-3586.

**Institution of new degrees.**—(For proposals to reinstitution of B.A., see above.) Suggestion that a teachers' degree should be instituted to qualify teachers for secondary schools; would require high Classical attainments, with a competent knowledge of theory and practice of various systems of education, 3588-3591.

Number of students who graduate in Arts, and with honours, each session, 3592-3595.

**Creation of new professorships.**—Desirable that Divinity Faculty should be enlarged in all the four Universities, 3595; present number quite unfit to overtake the whole field of theological study, 3596.

In confirmation of this view, quotes number of professors in Free Church Divinity Hall in Edinburgh, and in that newly instituted by the United Presbyterian Church, 3597.

A chair such as the Sacred Rhetoric chairs of Harvard and Yale, teaching delivery of sermons, reading of Scripture, and general elocution, much required, 3597-3600; instead of one chair of Biblical Criticism, there should be one chair for Old Testament Criticism and Exegesis, and one for the New Testament; the present chair of Systematic Theology should be divided into two, 3601; does not think the institution of such professorships would tend to multiply number of Theological students at St. Andrews, 3602; attributes as one

cause of falling off, that the competition of the Civil Service is drawing off the *élite* of the former candidates for the ministry; this falling off has been common to all Divinity Halls, and at the German Universities the same thing has been observed, 3603, 3604.

Length of University sessions.—Is not in favour of summer sessions, 3605, 3608; would, however, lengthen winter session by commencing on 1st October and continuing to end of April, with a break of two or three weeks in the middle, 3605-3607.

Mode of electing Rector.—Rector is elected by poll of the whole students, 3612; at present, election takes place three weeks after session begins (in November); would be desirable if it took place at beginning of November, 3609-3613.

Emoluments and retiring allowances of professors.—Incomes of three of the professors of St. Mary's College are very inadequate; income of witness for last three years has been £436; this is further subject to diminution by occasional claims by Government for arrears of tithes of lands of which the College is the owner, 3614, 3615; illustration of such action on the part of the Crown, and on the part of heritors of parish of St. Andrews, 3616.

Alternative suggestions for a remedy.—The Crown, as patron of the chairs, might make a gift of the tithes to the College; or, instead of keeping up a small Divinity College with four professors and twenty-five students, these professors might be added, two to Edinburgh and two to Glasgow, 3616-3619.

Retiring allowances of professors.—Scale might be raised to one-third after ten years, two-thirds after twenty years, and the full allowance after thirty years, 3620, 3621.

Appointment to bursaries and scholarships.—Should all be awarded by competition; and in case of valuable fellowships and scholarships, the holders, after completing University course, might be required to give tuition to students in subjects which professors could not undertake; or, as in England, act as lecturers in large non-University towns, 3622-3625.

University buildings and library.—Greatly in want of increased accommodation for University library; have

made application to two different Governments for a grant in aid, but have been refused by both, 3626.

Financial position and administration of revenues.—Would be desirable that the Crown should undertake financial management of revenues of St. Mary's College, and pay a salary in lieu of emoluments; reasons for this opinion, 3626-3635.

Does not think that the Theological chairs of the University should be thrown open to others than members of the Church of Scotland, unless the Church were disposed frankly to concede the right, 3636.

Of opinion that Hebrew chair should be retained in Faculty of Divinity, 3637.

DICKSON, REV. PROFESSOR, Glasgow.—Is Professor of Divinity in the University of Glasgow, and was formerly for ten years Professor of Biblical Criticism; has been a professor in Glasgow altogether thirteen years, 1893-1895.

Is a member of the Senatus, but not of the University Court, 1896, 1897.

Constitution and powers of University Court.—Thinks it may be desirable to have one additional member, and considers the most reasonable of several suggestions is, that he should be an assessor appointed by the Crown, 1898.

Disapproves of suggestion to give General Council a larger representation in the Court, 1899; of opinion that the University Court has worked well under present system, 1900, 1901.

Functions of General Council.—Council should not, as has been proposed, have the power of adjourning meetings from one day to another; nor should their powers be in any way increased, 1902-1904.

Regulations for graduation in several Faculties.—In Faculty of Arts, thinks the present system of conferring the degree of M.A. does not work entirely satisfactorily; students complain that sometimes the examination at times falls too much into the hands of the examiner appointed by the late Commission to be assessor to the professors, either as to the drawing up of the papers or as to judgment on the papers so set, 1905-1909.

Should like to see some modifica-

tion of the present course of study for graduation in Arts, to the extent that, instead of asking for average proficiency in three quite distinct departments, a man's excess above average pass number in any two should be set off against a slight deficiency in the third department, 1910, 1911.

In reference to a suggestion that candidates for graduation should have an option in subjects, thinks it would be desirable to grant this; one method would be to revive degree of B.A. in two departments, to meet the difficulty of a man who has no aptitude for the studies of the third, 1912; that is, that the degree should be given either for Classics and Philosophy, or for Classics and Physical Science, 1913, 1915, 1918; and the degree of M.A. should be confined to those who were proficient in the whole three, 1916; would be very glad to see Natural Science introduced as a fourth department into Faculty of Arts, 1917.

The other plan for granting an option to candidates for graduation in M.A. would be to have a solid foundation of some Arts classes, and then give option of following a course of study in Mental Philosophy, in Physical Science, in Natural Science, in Philology, or whatever other divisions might be made, 1912.

Degrees in Divinity.—One, the Doctor of Divinity, was given formerly as a purely honorary degree; is of opinion that the degree should be purely honorary, 1919, 1922.

More recently there has been introduced a new method of giving degree of D.D., on basis of composition of a thesis; candidates offer themselves, and apply to professor (witness) to prescribe a subject, and send in thirty copies of their thesis on it; for such a degree fees are charged; witness does not approve of this system, 1919–1922.

Witness prefers an arrangement under present regulations, whereby a student who has taken B.D. at the end of his course may choose to come up at end of eight years, and claim D.D. degree by passing a higher examination, or by writing a work of very great merit in Theological Science, 1919, 1925, 1926.

Began this system in 1865 or 1866; only one candidate has come up (last year), but did not pass, 1927–1929.

Has not occurred to the Senate to postpone conferring degree of B.D. until some time after completion of studies, 1930, 1931.

B.D. degree is conferred either on University students or on students of any Theological Hall in Scotland that gives a course of study at all equivalent to that of Glasgow University; professors alone are examiners; fifty-eight have passed as B.D. in the eleven years the degree has been in existence, 1932, 1934.

Entrance examinations.—Thinks there should be entrance examinations on two grounds—first, many who enter the University with a view to enter the Divinity Hall, enter it very ill prepared; passing from class to class, some of them reach at length the Divinity Hall, where, from compassion, the presbyteries allow them, though by no means equipped in learning, to pass; to meet the objection to this system, an ordinary matriculation examination in English Reading, English Composition, and a little Arithmetic, would meet the case, 1935, 1973; the second ground is, that so long as the present arrangement continues, the Universities stand in an invidious position in relation to the schools of the country, by undertaking in their junior classes the proper work of the secondary and best primary schools, 1935; would confine entrance examination test to Latin, with an amount of proficiency sufficient to construe Cæsar or Ovid pretty fairly, 1936–1939; confesses great indifference as to introduction of Mathematics, and does not think that in the meantime an examination in Greek could be introduced with advantage, 1940; this proposal discussed, 1941, 1945–1955; such an arrangement would probably exclude 8 or 10 per cent. of the most incapable students, 1942; secondary schools would be looked to for furnishing required amount of Latin; of opinion that primary schools cannot now be looked to, having regard to the encouragement to lower subjects held out by Revised Code, 1943; would object to inefficient or too juvenile students receiving instruction as private students at the University, 1944, 1957; objects to Universities providing, by tutorial or other methods, the education which should

be found and supplied by secondary schools, 1958-1984.

Length of University sessions.—Thinks it desirable, in the interest of many students, that they might attend short summer courses of lectures, to qualify as part of Arts curriculum; would allow two summer sessions of tutorial lectures, by a professor's assistant, or other qualified person, to count as equivalent to one winter session in same branch of study, 1985; proposal discussed as to its practicability for different students, 1986-1990; does not think it expedient to lengthen the session generally, 1991.

Extra-mural teaching in Arts Faculty.—Has no fixed views on subject, 1992-1994.

Creation of new professorships or lectureships.—Thinks there is a demand for a professorship of Geology; in Medical Faculty, there is great demand for a chair of Pathology; and in Faculty of Arts should like to see a chair of History founded, attendance on the latter not to be made imperative, 1995, 1996; would also like to see a chair of Comparative Philology; in Theological Faculty, does not desire any change from present constitution of chairs, 1997-1999; if any increase were made, thinks there should be a chair for Biblical Introduction and Antiquities, as distinguished from Biblical Criticism and Exegesis; should also like a chair of Homiletics or Pastoral Theology, 2000; would not change present footing of Hebrew chair, 2001-2003.

Emoluments of professors in the Theological Faculty.—Witness cannot complain of the emoluments of his own chair; these described, 2004-2009; should like if equalization of Theological fees were extended if possible to other Universities, in fact, levelled up to those of Glasgow, 2010, 2011.

Appointments to bursaries and scholarships.—Objects to custom in Glasgow of allowing second year's to compete with first year's students, 2012, 2013; calls attention to fact, that for two or three past years Glasgow University has found great decrease in competitors in essays for many small prizes of gold medals and sums of £10, and would propose to combine some of these, and so offer inducement of larger

prizes; reasons for this opinion, 2014-2018.

Financial position of University of Glasgow.—Has had special occasion, as convener of Library Committee and curator of library, to find that University revenues do not meet its expenditure in connection with the library and other matters; comparison of Government grants to other Universities; seem unfairly in excess of that allowed to Glasgow, and thinks there is a fair claim for an additional grant, 2019, 2020; statement of annual income of general fund of Glasgow University, 2021-2038; statement as to contents, catalogue, staff, income and expenditure of library, 2039-2045; a sum of £200 per annum more than at present would be required to pay librarians adequately, 2046; or in all, for library, to the extent of £500 a year, 2047; if University Court could grant retiring allowances to librarians, as to professors, valuable services would be both secured and retained, 2047; University librarian takes no charge of the Hunterian Museum; no alphabetical catalogue has been made, 2048, 2049; extent and quality of this library unknown from want of proper catalogue; many valuable and rare books have been bought for University, afterwards found to exist in Hunterian Library, 2050; class of literature and science to which books belong, 2052-2054; some years ago, Governors of Hutcheson's Hospital endeavoured, under an Act of Parliament, to provide for an assistant to make a catalogue, 2054, 2055; proposal by General Councils of other Universities that their members should have right to read in Glasgow University Library, on payment of sum of 10s. 6d., is in opinion of witness impracticable, and unfair to ask, 2056; necessity of larger supply of periodicals being furnished to Glasgow Library, 2057; hands in specimen of new catalogue of University Library, extending to 90,000 out of 100,000 volumes, 2058, 2059.

DONALDSON, JAMES, M.A., LL.D.—Is a Master of Arts and Doctor of Laws of Aberdeen University, 6049; is Rector of the High School of Edinburgh, and has been so since 1866, 6050, 6051; had experience of teaching before latter appoint-

ment, as Greek Tutor in Edinburgh University, and afterwards as Rector of Stirling Grammar School, 6052, 6053.

Constitution and powers of University Court.—Suggests the necessity of a larger Court to deal with the four Universities together, to secure (1) uniformity of standards of examination for graduation in honours, (2) access to all the libraries for members of any University Council, and (3) to arrange for similar entrance examinations in the four Universities, 6055; opinion as to how such a Court for Scotland should be composed, and sketch of models existing in Prussia and France, 6056–6061; proposal discussed, 6062, 6063.

Curriculum of study and regulations for graduation in Faculty of Arts.—With a view to confining University work to stimulating and superintending original research, would retain a boy at school until, say eighteen, whose entry into the University would be obtained by an examination (a leaving examination) at school synonymous with the *abiturienten* examination; such boys should be able to read Xenophon and Sophocles in Greek, and Tacitus in Latin, also a piece of French and German he has not before seen, and able to do Mathematics up to Trigonometry, 6064, 6065, 6067, 6068, 6076, 6077–6086; proposal discussed, 6089–6092; supposes, on adoption of this system, that a change in the curriculum for the degree of M.A. would take place, requiring only two or three primary subjects; a knowledge of Physiology, Practical Psychology, and the history of Great Britain and the laws of Britain, being compulsory; with a larger choice of optional subjects and classes, on any of which he might, after two years of study, be asked to be examined, 6069, 6073, 6074, 6093–6098; probable effect of this proposal, as deterring entry of Divinity students into University, from inability to pass such an examination, discussed, 6087, 6088; the standard employed in proposed degree would not be higher than what is at present required for M.A., 6099; considers the large class of young men who now leave school to attend the University, from fourteen to eighteen years of age, and who afterwards go into mercantile offices,

would, under proposed system, be better cultured by remaining at school; of opinion that the University does the work of a school much worse than the school itself, 6100–6103; would make Medical students and Law students undergo the same examination as the other students before entering on their professional course of instruction, 6104–6106; suppose a student wishes to enter Medical Faculty, who has not been educated in this country, would still make him undergo the same entrance examination, 6107.

Length of sessions.—Has a very strong feeling, that for wealthier boys leaving the High School or the Academy, a summer session would be valuable, especially for culture in, say Latin, Greek, French, and German, and so fill up time that is at present unoccupied, 6109–6111.

New professorships.—In carrying out proposed new scheme, some new professorships and lectureships; in each department there would need to be two or three additional men, salaried professors, 6112; there ought to be lecturers too, 6113–6117.

Extra-mural teaching.—If witness' scheme were carried out, extra-mural teaching would not be necessary, all teaching would take place within the University; students who acquire by their degree the power of teaching, would after two or three years teach if wanted, and these would be the men from whom professors would be chosen, 6118; if present system retained, thinks there should be extra-mural teaching in Arts, if professors' salaries were increased, 6152–6154.

Bursaries and scholarships.—Bursaries should be decided by competition, and holders of scholarships should be required to do work in University teaching or investigation, 6119–6121, 6126, 6127; if a larger system of bursaries were instituted throughout the schools, a decided impulse would be given to higher education in the parish schools, 6122, 6127; in presentation bursaries, would exact a good standard examination, 6128–6131; as an Aberdeen graduate, is of opinion that some of those holding presentation bursaries are not proper men to be at the University, 6134–6141.

University libraries.—Witness would desire as much facility of access to the University Library as

he has found in gaining admission to the British Museum and the Bibliothèque Nationale in Paris, so that a cultivated man who lives here might have an opportunity of carrying out any study, 6142; suggests to Commission that by a union of the Advocates' with the University Library, a magnificent national library for public reference might be obtained, 6142-6150; necessity of a further provision for a Museum of Works of Art, 6151.

Entrance examinations. — Thinks, under present system, a great move would be made if from all students for the three years' course an examination were exacted, that is, before passing into the second year's classes, 6151, 6152.

*Re-examined.*—Theological Faculty.—

Thinks that for study of Theology as much freedom as possible is desirable; would make Theology a science within the University, uncontrolled by those outside of it; and is of opinion that if the University Court alone had control over the Theological classes, as it has over all the others, nothing more would be requisite for making them free; at present, the Church may interfere with the opinions of a Professor of Theology, but if the professors were not bound by any test to a Church, they would, instead of being merely exponents of the ordinary Theology, naturally lead in investigation, 12,070-12,072; reasons for this opinion, 12,073-12,077; proposal further discussed, 12,078-12,092, 12,098-12,111; if University Court had entire control of Theological Faculty, there might be lay professors teaching Hebrew, for instance, 12,093; sketch of an ideal scheme for thoroughly equipping the Theological Faculty with professors, 12,094, 12,095; would have altogether fifteen or twenty professors in Theology, supposing there was one Theological Faculty for the whole of Scotland, 12,096.

DUNCAN, CHARLES, Advocate, Aberdeen.—Is a member of the Society of Advocates, Aberdeen, and a member of the General Council of the University of Aberdeen, 11,939, 11,940; is not a graduate, 11,941.

Statement of witness' views on the present working of the bursary system at Aberdeen read, with a view to show that the fact of

the Commissioners', under the Act of 1858, having decreased the number and increased the value of the bursaries, has resulted in many abuses by and towards competitors, 11,942-11,959; suggests as a practical remedy that if a student competes once, and gains a bursary, he should be compelled to go on with his classes; no second competition should be allowed, 11,960-11,962; or that, having failed once, he might compete once again, 11,963, 11,965; alternative remedies discussed, 11,966-11,999.

DUNCAN, J. MATTHEWS, M.D.—Is a Doctor of Medicine of the University of Aberdeen, and has been in practice in Edinburgh for about thirty years, 7158-7160; has been a lecturer for twenty-four years, 7161.

Regulations for graduation in Medical Faculty in Edinburgh.—Is well pleased with course of study, but thinks there might be improvement in the examinations; candidates should be allowed more liberty as to the time of going up for professional examination, 7163; would allow them, within a certain limit, to select the subjects for their examination, 7166-7171; is further of opinion that a man might be informed of the subjects in which he has been successful, and of those in which he has failed; also, that by allowing those in which he is proficient to count, he would only have to come up again for those in which he had failed, 7162-7165.

Thinks preliminary examination of Medical students very satisfactory at present, but it would be desirable gradually to increase the severity of it even yet, 7172-7183.

Of opinion that it should be raised to the present M.A. standard for University graduates in Medicine, 7184.

Has a very strong opinion against institution of lower degree, as B.A. in Faculty of Arts, 7185; considers it would be a deceptive degree, as stamping a University education which is in itself inefficient, 7185, 7186; alternatively, would rather make a man take a Science or Philosophy title above M.A., than B.A. without Science or without Philosophy, 7187.

In Faculty of Medicine in Edinburgh, thinks that some additional teaching in Pathology on the important subject of Histology would

be of great advantage, 7188, 7207; is not prepared to say an additional chair is necessary, but it could be done by taking a three months' course from a qualified assistant, 7189-7193, 7208.

With the exception of Anatomy, and perhaps Chemistry, all other teaching is defective in teaching power, 7194, 7195; would remedy this by assistants, and the professor giving more time himself, say another hour a day of practical teaching, 7196-7202; explanation of what is meant by 'practical teaching,' by the student handling and seeing, by demonstrations upon the dead body, and upon preparations, 7203, 7206.

Extra-mural teaching.—Has been very successful and very beneficial in Faculty of Medicine in Edinburgh, 7209-7218.

Patronage of chairs in the University.—Does not think this is on a satisfactory footing, 7219; witness feels subject too difficult to indicate the precise change required, but is clear that Town Council of Edinburgh should not have the paramount influence at elections, 7220-7226; if Curatorial Court were to be altered, would prefer introducing another member elected by General Council, 7227-7229.

Emoluments of professors of Medical Faculty.—Thinks they are decidedly insufficient, and likely to be increasingly so, from the increasing labours of the chairs, 7230-7232; a distinction should be made between emoluments of chairs where the holders ought to have practice, and more scientific departments where the professors should be almost debarred from practice, 7233, 7234; of the latter class are the whole of the scientific chairs, 7236; in such as Physiology, Materia Medica, and General Pathology, practice is not impossible, but is very undesirable; does not say they should be debarred by Ordinance, but thinks it quite inconsistent with their duties, 7236-7244, 7246; the chairs where it would be impossible to combine practice with teaching are those of Anatomy and Chemistry, 7245, 7247.

The fees in the extra-mural school to qualify for a degree are the same as in the University, but when classes are not used for University

purposes they are one guinea less, 7248-7250.

Of opinion that Medical students' fees should not be raised; effect would be ruinous to the University, sending students elsewhere for their education, 7251-7253.

In witness' experience, the teaching of Medicine extra-murally cannot be made self-remunerative; it does not pay, and it is only from a desire to cultivate the higher branches of the profession that he continues it, 7254-7257; has to mention that the best students in Medicine who come to this country are from Denmark, Sweden, and Norway; and there a student of Medicine pays nothing at all, and has to devote nine years to his studies; of these students, some are sent by Government to travel, and some to report; even regarding them as selected students, they are far above anything we can produce, 7257-7264.

FERGUS, ANDREW, M.D.—Is a Doctor of Medicine, a member of the General Council of the University of Glasgow, and also President of the Faculty of Physicians and Surgeons in Glasgow, 7530-7533.

Functions of General Council.—Does not think Council is sufficiently represented in the University Court; of opinion they should have two members in addition, making three representatives altogether, and would allow a representation of the minority, 7534-7546.

Thinks that the transference of the election of Rector from the students to the University Council would be advisable, 7547, 7548; considers the election of distinguished men from a distance is an evil, and that men of less distinction, able to perform the duties of president of the Court, would be preferable, 7549, 7550.

Course of study and graduation in the Faculty of Medicine.—The preliminary examination should be materially altered; in proof of this, refers to a table appearing in the minutes of the meetings of the General Medical Council, 7551-7554; suggests methods of extending preliminary examination; would include Botany, Natural History, general science of Chemistry, and Natural Philosophy; holds that Greek, at present compulsory, should be made optional, in exchange for French and German; if subjects were thus



extended, would make one year's attendance at the University compulsory, instead of two years, as in the regulation for B.Sc. in Calendar, 7556; as another way to an increased examination, the B.Sc. degree, section Biology, including Chemistry, Anatomy, Physiology, Comparative Anatomy, and Botany, might be taken, substituting French and German for Anatomy and Physiology, 7551-7555.

Would also make Greek optional for M.D. degree, if French and German were taken as a substitute, 7557.

Entrance examinations.—Of opinion that there should be an entrance examination to all the classes, 7558; scarcely thinks this would diminish number of students; or to meet this, all students going forward to take a degree should pass an examination, 7559, 7560.

Believes that secondary schools would soon rise to standard of examination, 7561.

New professorships.—Desires a professorship of Pathological Anatomy, with a six months' course, or three months' lectures, and three months of demonstrations; thinks there should also be a Professor of History, and Professors of Modern Languages, in the Universities, 7562.

Length of University sessions.—Would lengthen these by a summer session of three months; would abolish holidays in the ends of the months, and would give holidays at Christmas, between winter and summer sessions, and at end of summer session, 7563-7565.

Extra-mural teaching.—Should be recognised, on the principle that the fee charged should be the same as intra-mural fees; and further thinks the fees in the University and in the Medical classes ought to be raised, 7566, 7567, 7571, 7572; Glasgow University has had extra-mural schools, sanctioned by University, since the last Commission, 7568-7570.

Bursaries, fellowships, and scholarships.—Holds that all these should be competitive, 7573, 7574; also of opinion that, unless it is enacted by the founder that services should be rendered in the way of teaching or otherwise by bursars or fellows, the University has no claim

upon their services, 7574-7576; such employment considered a grievance by persons so employed, 7577; thinks present system of voting the prizes in the Arts classes by the students a very bad one, and reasons, 7579-7581.

FRASER, PROFESSOR, Edinburgh.—Is Professor of Logic and Metaphysics in University of Edinburgh, and has been so for twenty years; has also for the last seventeen years held office as Dean of the Faculty of Arts, 2181-2185.

Constitution and powers of University Court.—Has to suggest a change on sub-section 1 of section 12; is inclined to think that the University Court should be a court of appeal from Senatus, but not also a court of review, as tending to diminish the sense of responsibility on the part of the Senate, 2186-2194.

Functions of General Council.—Thinks its functions, as at present constituted, should mainly be to elect an assessor, or it may be assessors, the member of Parliament, and the Chancellor, and understands its function not to be executive, or even legislative, 2195, 2196; would increase representation of General Council in University Court by giving them one additional member, 2197.

Course of study and regulations for graduation in Faculty of Arts.—Would maintain present curriculum for degree of M.A., but is disposed to alter the proportion of marks now required in each subject for the pass examination, and grant the pass to a candidate by admitting varying proportions, so long as some marks are gained in each subject, so as to allow a man to pass who is strong in Classics and weak in Mathematics, or strong in Mathematics and weak in Classics, provided he can make up the total number of marks, 2197-2202; when a man goes in for honours, specializing should begin; would specialize Philology, Mental and Moral Philosophy, Mathematics, pure and applied, and is disposed to suggest a department of English Literature and History, and a department of Natural Science, and an option might be given between the latter and the present Mathematical department,

2203, 2204, 3456; with regard to last subject, has to mention that, although a Natural Science department for honours has existed for fifteen years, there have been only three successful candidates, while about 100 have taken honours in the other three departments, 2205-2207; suggestion that a third class of honours might be instituted, to be conferred upon such as reach more than a certain percentage in the pass examinations, these not to be debarred from power of going on afterwards for higher honours, 2208-2217, 3456; statistics in regard to numbers who have taken honours during the last fifteen years, 2218-2220, 3456.

Expediency of instituting any new degrees or Faculties.—Has to call attention to anomalous position of nine chairs, nominally in the Faculty of Arts, which are properly not in any Faculty at all, so far as being connected with the curriculum, 2221, 2222; in short, all chairs not distinctively Theological, Medical, or Legal, have been thrown into the Faculty of Arts; has to propose a new division; would suggest, as worthy of consideration, the organization of a Faculty of External Science, pure and applied, with the degrees of B.Sc., M.Sc., and D.Sc., with a relative curriculum and examinations; new Faculty might include chairs of Chemistry, Natural History, Botany, Physiology, (perhaps) Engineering, Agriculture, and Practical Astronomy, 2223, 2224; Science graduates should also have some training in either Philosophy or Classical Literature, at option of candidate, 2225-2227, 3456; in Faculty of Arts it would be desirable, especially to meet the case of the legal profession in its lower gradations, and of the scholastic profession, to have a minor degree for those students who cannot take the degree of M.A.; has some hesitation about the name, but either B.A. or Licentiate of Arts (an old Scotch title); proposed examination for this degree, with two alternatives, eminently suitable for masters of secondary schools and teachers of the higher primary schools, 2228-2230; statistics to prove that abolition of B.A. degree in 1862 did not increase number who took M.A. degree, 2231-2233; would prefer

that intending teachers of secondary schools should take M.A. degree, 2231; would not make holder of B.A. degree a member of Council, or entitle him to any privileges of membership, 2233-2235; proposes that students should be allowed to take honours in Philology or Classical Literature, after having passed the M.A. degree; suggests that present higher honours of Doctorate of Science, in Mental Science and Philology, would be better described if called Doctors of Philosophy and Doctors of Philology, 2236, 2237, 2252-2256.

Entrance examinations.—Various difficulties in the way of instituting entrance examinations at present, from want of good secondary schools in most parts of the country; if Universities did not have junior classes, the means of a liberal education, imperfect though it be, would be taken away from a large portion of the community; entrance examinations must therefore be introduced very gradually, and perhaps made compulsory at end of ten years; alternatively, until secondary schools are much better organized, a testing examination might be placed at end of first year as a bar from entering second year's classes, those failing being retained within junior classes until they could pass, 2238, 2242-2246; in introducing an entrance examination, a good deal of discretion must be left in the hands of University authorities, 2239, 2240, 3456, 3457; would still leave room for private students of special subjects in Arts who did not intend to graduate, 2241-2246; were a complete system of secondary schools established, would put the entrance examination at the very commencement of the student's course, but should still hesitate to refuse to provide, by means of professors' assistants conducting junior classes, for those who preferred the University to a secondary school, 2247-2250; parish schools might also, if parish would pay teachers an extra sum, be made available for teaching of secondary subjects; such a case within witness' knowledge, 2251.

Creation of new professorships.—The institution of professorships not connected with the curriculum are apt to be weak, and in some degree to weaken all other chairs; nine such exist in Edinburgh unconnected with any Faculty; with regard to assistant-

ships to professors, those which have grown up in the Faculty of Arts are very valuable, as increasing tutorial power of the classes, 2257.

Length of University sessions.—Is disposed to adhere to the principle which divides the academic year in Arts into one session and one recess; does not see way to two sessions, nor to a much greater expansion of the present session, 2258, 2260.

Tutorial classes by assistants, to meet case of students for whom University guidance was wanted, during summer months, have been attempted in Latin, Greek, and Mathematics in Edinburgh during the past ten years, and the attendance has steadily improved; these do not qualify for degree, 2259–2262, 3458.

Extra-mural teaching.—While not prepared absolutely to object to extra-mural teaching as a remedy for professorial inefficiency, cannot help thinking that it has a tendency to create a competition for students which converts the professor and the extra-mural teacher into competitive crammers for the pass degree, 2263–2268; extra-mural teaching has been in existence in the Medical Faculty for nearly thirty years; but circumstances of that Faculty are in many ways different from the Faculty of Arts, 2269, 2270, 3547; does not object to extra-mural teaching, provided two evils are guarded against, viz. (1) lowering the quality of the teaching, making it a mere matter of competition; and (2) depriving the chair of the services of an efficient teacher and investigator by weakening its attractions, 2271; if introduced, there should be an addition to the permanent endowment of the chair, 2272.

Emoluments and retiring allowances of professors.—Suggests, as a matter for consideration, whether, as a partial remedy against inefficiency, there may not be a reason for shortening the term of thirty years required for the full pension, so as to be relieved of an inefficient professor, say after twenty years' service, 2274; does not think the salaries of professors in Faculties of Arts, independent of fees, are sufficient at present, 2275; has a difficulty in naming any fixed sum as that which a professor in Arts should receive, but thinks that in Edinburgh and Glasgow about £1000 a year, one-half being de-

pendent on fees, 2272, 2281–2283, 3506.

Inter-University competition.—A student graduating in Edinburgh in Arts must attend here the last two sessions, but may take Latin here and Greek in Glasgow, or may take two years of his curriculum at another University, 2276–2280.

*Re-examined.*—Recapitulation of former evidence, 3456–3458.

Mode of appointment to scholarships, fellowships, and bursaries.—Considers it an important question for the Commission to entertain in amending the University system, whether in existing or future foundations of scholarships, it should not be made a condition that the holder should perform any duties imposed upon him by the Senatus or the Faculty; the Senatus of Edinburgh had lately occasion to contemplate putting this power, which they hold in connection with the Rhind scholarships, into operation, the idea being to employ the successful candidates as examiners, or as assistants in the classes, or as teachers of special subjects; have no power at present, except in case of the Rhind scholarships, to employ scholars or fellows in that way; there are about twenty Arts scholarships, of the aggregate value of about £1400; is in favour of conferring such a power upon the Senatus, or upon some University body, as might determine the expediency and manner of applying it in special cases, 3459–3465.

Bursaries.—The Faculty of Arts has instituted an annual competitive examination for all the bursaries over which they have the necessary control, which is held two days before the opening of the session in October; the effect has already been to raise the standard of a number of the new entrants; has, further, endeavoured to get the patrons of eighty or ninety bursaries in Arts to hand them over for annual competition, but the attempt has not been very successful; there are altogether 110 bursaries in Faculty of Arts, with an annual revenue of about £2400, besides about twenty scholarships, and four of what are called fellowships, 3466–3472; Faculty of Arts has of late years tried to superintend the 110 bursars, who ought to be in attendance in the Arts classes, by making a rule that the bursaries are not paid unless the student produces a certificate twice a

year, from the Dean of the Faculty, of his attendance in the proper classes, and proficiency, 3473, 3489-3491; the money is paid by the factor, in whose hands is also the money for some private bursaries, 3474, 3477; hands in printed returns, prepared for the Senatus, of particulars regarding bursaries, 3476, 3495; also lists of fellowships and scholarships, which include the Faculties of Divinity, Law, and Medicine, as well as the Faculty of Arts, 3484; strong feeling of Faculty of Arts and Bursary Committee that they do not nearly utilize the £2400 which they annually have; sees no remedy, except by legislation, or being looked into as was done by the late Commission in the case of Aberdeen, 3485-3488, 3505; of opinion that all bursars, private or otherwise, should be under the control and supervision of the University, 3496.

Election of professors.—If witness were to suggest any modification, it would be in the way of introducing a third element into the body of curators, by the Crown appointing one or two additional curators, 3506-3512.

FULLER, PROFESSOR, Aberdeen.—Is Professor of Mathematics in University of Aberdeen, and was, before the union of the Colleges, Professor of Mathematics in King's College, 5126, 5127; has had twenty-five years' experience in Aberdeen as a professor, 5128, 5129.

Course of study and regulations for graduation in Faculty of Arts.—There is a strong feeling in Aberdeen that present curriculum is not adapted for all the classes of students who wish to avail themselves of it, and that some modification is desirable, 5130; has to suggest that present curriculum should be left, and an alternative curriculum introduced, omitting Greek for, say, French and German, and substituting Chemistry for Moral Philosophy, 5131, 5132; it would also be well to leave an opening whereby Senatus might, with consent of University Court, substitute one class for another, 5132; would not allow any alternative for Logic and Metaphysics, but has an idea that a short course of Logic of, say, six months, taking alternative days, would be very useful for all classes of students, especially for Medical students, 5133-5137; might not be disadvantageous

to allow Classical students an option of pursuing Classical studies further at the expense of senior Mathematics, 5138, 5139; number of students in junior and senior Mathematical classes, 5140-5143; present number is less than before union of the Colleges; accounts for difference by fact that many boys then at College now remain at school, 5144-5146; diminution in Greek and Latin classes, from same causes, has been larger, 5152-5155; would have more occasional students, mostly those who are about to enter profession of civil and mechanical engineering, if classes were taught in the new instead of the old town, 5146-5151; is strongly opposed to institution of B.A. or of any new degree in Arts, 5157-5163; would rather recommend alternatives to be taken in the long vacation, with a view to enabling the students to get over the curriculum in three winter sessions and two summer sessions; would take Chemistry, Natural History, and Botany from Medical Faculty, and make them part of the Arts Faculty, and let an examination in these subjects pass for an Arts degree in place of examinations in Greek, Moral Philosophy, and perhaps in Logic, 5163, 5164, 5199, 5214; does not approve of Science degree, 5165-5167; no room for anything of the kind in Aberdeen, 5168-5170; of opinion that if degree were modified as suggested, all men entering any profession could and should go through a regular curriculum, 5171-5175; object of these proposed changes is to facilitate students taking scientific subjects for a scientific profession, and literary and mental if their profession involve philology and mental science, 5176-5179; expects by this method to enable Medical students to take M.A. degree, and to get through their curriculum in six years from entering University, 5180-5184, 5198, 5205; another objection to a new degree in Arts, is the large number of bursaries appropriated to M.A. degree; for any lower degree, or degree by another name, these would not be available, 5185-5188, 5229-5233.

Creation of new professorships.—A Professor of English, to divide subjects with present Professor of Logic and English, very much wanted, 5189; Natural History has

at present one chair, should be divided between a Professor of Geology and Mineralogy, and one of Zoology and Comparative Anatomy, 5190; in Aberdeen there is this peculiarity, that the Professor of Natural History belongs both to the Faculty of Arts and the Medical Faculty, 5191-5193.

Apparatus for professors.—There is one important desideratum, a Physical laboratory for the Professor of Natural Philosophy; has one assistant, but requires a mechanical assistant, 5194-5197; thinks that for students who adopt the present curriculum for M.A., without any alternatives, the time might be reduced by making Natural History, which is a winter class, a summer class, 5200, 5201; does not see why Moral Philosophy class might not be made a summer class, 5202-5204.

Length of University sessions.—It would be better to begin in the beginning of October, and have a longer break at Christmas, 5206-5213; thinks that, in view of increase of University examinations, it would be desirable to concentrate them, 5215; proposal discussed, 5216-5224.

Preliminary examinations.—Does not think any preliminary examinations should be conducted by the professors, in whole or in part, 5225, 5226; agrees generally that the multiplication of examinations is a failure, 5228.

Election of University officers.—Would rather, in preference to present system of election by nations, have a general poll, 5234-5236.

Retiring allowances.—Thinks that more inducement should be offered to professors advanced in life to retire, 5237; has in practice found the present scale of retiring allowances too low, 5238; does not think that proposal to introduce summer sessions would prevent professors from applying for professorships, 5239; of opinion that it would not do for assistants to do summer work, 5240, 5241.

GAIRDNER, PROFESSOR, Glasgow.—Is Professor of the Practice of Medicine in the University of Glasgow; was appointed in 1862; is a graduate of Edinburgh, and was up to 1862 in Edinburgh as an extra-academical teacher, 7430-7432; has in present class on an average about 130 students

annually, 7433, 7434; has only one official class, but teaches another under his appointment as physician in the Western Infirmary, 7435; Western Infirmary was built under an obligation to provide means of teaching for University, 7436, 7437; there is also Clinical teaching in the Royal Infirmary, recognised by the University, although not conducted by professors, 7438-7443.

Curriculum of study for Faculty of Medicine.—Is on the whole well satisfied with it, 7444; at present Pathological Anatomy is an alternative course; thinks it should be imperative, and entirely separate from any other course, 7445-7447.

Examinations for Medical degrees.—Is exceedingly favourable to recent introduction of seven extra-professorial examiners; should like very well to have more, 7448-7450, 7455; departments existing in Medical examinations, 7451-7454.

Course of study and graduation in Arts.—Thinks curriculum is far too unbending, and does not represent present state of human knowledge; inclined to make part of course imperative, and part optional; made such a proposal to General Council in 1863 or 1864; divergence of subjects to follow a fixed entrance examination, 7455, 7456, 7460; has no objections, if thought necessary, to institute a degree in Science, if found practicable, 7461; but believes it could be dispensed with, by widening curriculum of Arts and including in it a curriculum of Science, 7462; would not allow study with a view to Arts degree without passing a preliminary or entrance examination, but would still leave room for voluntary study of any class, 7463-7467.

Extra-mural teaching.—Favourable to its introduction into Faculty of Arts, 7468-7470.

New professorships or lectureships in Faculty of Arts.—Great necessity for a Professor of Pathological Anatomy; the subject is in the curriculum, but there is not even an *ex officio* lecturer on the subject for the University; such chair should have a very considerable endowment, 7471; the means of giving practical instruction in his department should also be secured to such professor, and the proper man for such professorship would be the man who holds office of

Pathologist to the Western Infirmary, 7472, 7473; in Glasgow there is no Professor of General Pathology, and none is required; considers such an appointment a mistake, 7474.

Provision of assistance and apparatus for professors.—Witness has to furnish both assistance and apparatus for his class at his own expense; chair requires two assistants and a museum, a considerable amount of drawings, models, etc., which could be increased with advantage; duties allotted to assistants, 7475-7477, 7481-7485; has never asked any money for these purposes, knowing present state of University funds, 7486; is in practice as a physician, but only in consulting practice; thinks chair would be weak without this, 7478-7480, 7493; has to make a personal prayer to the Commissioners on behalf of the chair of the Institutes; there is a most excellent professor now, but the chair is crippled by want of funds for means and materials, 7487.

Length of University sessions.—Cannot see a way to any advantageous change, 7488-7491.

Emoluments of Medical chairs.—Witness thinks his own emoluments sufficient, 7492, 7493; chairs that require most care are such as the Institutes of Medicine and Pathological Anatomy, the number of students being small, and the mode of teaching expensive, 7494; Anatomy is well endowed, 7495-7497; chairs defined which might and might not be combined with practice, 7498-7501.

Functions of General Council.—Thinks it a body very badly constituted for deliberation, from varying nature of the attendance at its meetings; is favourable, if it could be managed, to a deputation of its powers to a committee or committees, who should report to the Council; and it is extremely desirable that they should have power to consult between University and University; some years ago such power was used, but disputed, and decision left doubtful, 7503-7512, 7523-7526.

Constitution of University Court.—Is not in favour of a greater representation of the General Council in the Court, 7513, 7520-7522; is inclined to go against any increase in numbers of University Court; but thinks it would be an improvement if the Rector did not sit in the Court,

excepting through his assessor, or power might be given to sit and confer, without voting, 7513-7517; assuming Rector to be deprived of his vote, one member might be added in place of him, 7518; not prepared to say where this new member should be found, 7519.

Fees in Medical Faculty.—Thinks it would be very reasonable to raise them, and hardly supposes there would be any hardship on students if all the Universities increased fees from three to four guineas, 7527, 7528; would not touch graduation fees; has to call attention to what appears very inequitable, in the fact that the Universities of Scotland, which receive very little public money compared with those of Ireland, should be charged £10 for a stamp on each doctor's diploma, on a more expensive course, while in the Universities of Ireland there is no stamp-duty, and their diploma only costs five guineas, against the charge in Scotland of fifteen guineas, 7529.

*Re-examined.*—Desires to take up former evidence on subject of Clinical teaching, to effect that every teacher of a systematic branch ought to have a practical branch, a laboratory in Chemistry, a dissecting room in Anatomy, and an experimental room in case of Physiology, allied to it; witness has to refer the Commissioners further to his evidence on this subject as given to General Medical Council, by their request, in 1869—(evidence quoted); grounds stated for opinion that no systematic teacher can long maintain his efficiency at the highest point without being a Clinical teacher, and also for the view that it is absolutely necessary that the teacher of the Practice of Medicine should appear in the hospital, and be a Clinical teacher as well, 10,942-10,948; does not object to present arrangement; the University continues to recognise all the physicians and all the surgeons of the Royal and Western Infirmaries as having the power of giving qualifying Clinical courses, 10,949-10,957; objects of University in founding Clinical chairs described and discussed, 10,958-10,962\*.

GEDDES, PROFESSOR, Aberdeen.—Is Professor of Greek in University of Aberdeen, was before the union Professor of Greek in King's College, and has been altogether twenty-one years in

chair of Greek, 5242-5245; was also for three years Dean of the Faculty of Arts, 5246; has never been a member of the University Court, 5247.

Constitution and powers of University Court.—Has no suggestions to offer, except that he is strongly in favour of adding two members to the Court, by giving one additional to the General Council and one to the Senatus, 5248-5251; reasons for this opinion, 5252-5256.

Graduation in the Faculty of Arts.—Of opinion that it is not at present desirable to disturb the existing system, which has worked well in Aberdeen, and produced a high average of attainment, 5257, 5258, 5264, 5265; if, however, secondary education were becoming as advanced as in Germany, the present curriculum should be dissolved into, probably, four separate curricula, each qualifying for degree, and each being a speciality in some distinct direction, 5259-5261; possibility, by means of a high entrance examination for candidates for a degree, to introduce this system at once, discussed, 5266-5268; proposed subjects and nature of such an examination, 5269-5283.

Institution of entrance examinations.—Is of opinion that the time has come for instituting such; of an excluding kind in the case of those entering for a degree, but not applicable to private or amateur students, 5284-5287; not so much required in Aberdeen as elsewhere, but would be advantageous as eliminating first or junior classes from other Universities altogether, 5288-5291; is aware that no teaching University in this kingdom has such an exclusive entrance examination, but refers to Germany as an example, 5292-5295; alternatives of a 'leaving examination' by schools, and the Universities aiding them by extending the system of local examinations to the schools, 5296-5299; if an entrance examination to Arts is instituted, that for the Medical Faculty would require to be very much raised, 5300, 5301.

Institution of new degrees in Faculties.—In Arts, is favourable to a degree inferior to M.A., which a student might obtain after two years' study at the University; proposed subjects essential for course,—Latin, English Literature, and Mathematics, with a large optional variety of sub-

jects; considers this would be a valuable degree, not only for medical and legal professions, but for engineers, architects, and surveyors, for teachers, and as a preparation to our large industries, 5301-5310; believes franchise would require to follow such a degree, 5311, 5313, 5327, 5332; of opinion that a number of students would, after taking B.A. degree, proceed to take a higher degree, 5314-5324; question whether B.A. degree should be made compulsory on students entering Medical Faculty, 5325, 5326-5331.

Creation of new professorships or lectureships.—In view of a wider curriculum, necessary to have in Aberdeen a separate chair of English Literature, a chair of Comparative Philology, and two chairs of Modern Languages, French and Romance, and German and Teutonic Literature; certain other subjects might be overtaken by lectureships, such as on the Philosophy of History, especially Archæology, and one on Celtic would not be inappropriate, 5333-5335; doubtful as to value of a chair of Principles and Practice of Education, 5336-5339.

Emoluments and retiring allowances of professors.—Has to corroborate report of committee of Senate, with regard to retiring allowances on a more liberal scale, already brought under the notice of the Commission; would add that it would be a valuable improvement if retiring allowances of professors were calculated by sessions instead of years, 5340, 5341.

Salaries of professors.—Under the impression that Parliament is more willing to grant subsidies for Science chairs; thinks it might be possible to obtain a full endowment for Science chairs out of public funds, leaving the old endowed funds for other purposes, 5341-5344.

Libraries.—Has to call attention to necessity for raising the grant to the library to a position more in equality with Glasgow, which obtains £707 a year, as against £320 to Aberdeen, under a right which was originally one and the same, 5345.

GRANT, SIR ALEXANDER, Bart.—Principal of University of Edinburgh since 1868; is a member of the University Court, and has constantly

attended the meetings of the Court, 1-4, 35.

Constitution of the Court under 11th section of Universities Act requires amendment to extent of giving the Council power of electing two assessors instead of one; reasons for desiring this change, 5, 9, 10, 45.

Definition required of tenure of office by Chancellor's assessor; cases quoted in which doubt has arisen, 5.

Tenure of assessors should expire when tenure of Chancellor or Rector who appointed them expires, 5, 11, 12; alternative view—that assessors of Chancellor or of Rector might hold office until new Chancellor or Rector is appointed, 13, 14, 54.

Constitution of Court should give power to some authority to fill up temporary vacancies, 5.

Considers that the words in section 12 of Act, 'to review all decisions of *Senatus Academicus*,' should be repealed; reasons therefor, 5.

No definition in sub-section 2 of section 12 of what is meant by 'to effect improvements in the internal arrangements of the University;' *Senatus* have misconstrued this section in creating professorships and instituting local examinations; also by altering regulations for graduation in Science, and creation of certificates for women in Literature, Philosophy, and Science; power to make such changes should be reserved to University Court, 5.

Addition required to sub-section 3 of section 12, because duties of professors are not prescribed; Court might, with sanction of Chancellor, have power to define professors' duties, subject to appeal to the Queen in Council, 5, 22, 26-35; case proving necessity of such arrangement; Professor of Practical Astronomy refusing to give lectures because predecessors did not do so; of opinion that chair was founded in 1786 with view of lectures being given for those destined for naval life; paper lodged with correspondence of Court on this subject, 5.

Power should be given to University Court to hold property in trust for University when so devised; difficulty under 6th sub-section of section 12 in case of Sir David Baxter's legacy, 6, 18-21.

Court should, subject to approval of Chancellor, have power to fix its own expenses; case given showing necessity of this, 6.

No regularity of method in procedure for obtaining alteration of the Ordinances, and rules required prescribing duties of Courts of different Universities in communication with each other; Court should get notice from Privy Council of all alterations applied for, and such alterations should be registered in the Register Office for public reference, 6.

Power of appeal should be given to Queen in Council against infringements of Ordinances by Universities; note of such infringement by the University of Aberdeen, whereby two years of Medical study may be reckoned, by attendance during one summer and one winter session, within twelve months, 6, 7.

Power of Court to review decisions of *Senatus Academicus* only exercised under appeal; words of statute have raised a doubt on the subject, 15, 16.

University Court should be a court of appeal from *Senatus*, 17.

The University Court, as a court of appeal, deleted the names of Mr. Gladstone, Mr. Wm. Chambers, and Mr. Lyon Playfair, from General Council, because they did not register during their terms of office; Glasgow and St. Andrews have given contrary decisions; is, however, of opinion that ex-members of University Court should become life members of General Council, 36-42, 59-61.

Functions of General Council under section 6 are two—the election of office-bearers, and the making of representations to the Court on academic matters: the former it discharges well, but the latter with great uncertainty; of opinion that the Council could never become an effective body for deliberative, and still less for executive purposes, 43, 52.

General Council should have power of electing two assessors instead of one; also of petitioning Parliament or the Home Secretary; should not have power of initiating changes in the University, 45, 47, 53.

Believes that by Scotch Reform Act of 1868, Bachelors of Arts in Scotch Universities would hereafter sit in the Council, unless something is done to obviate that, 51.

Not desirable on the requisition of a small number of members to give General Council an opportunity of meeting specially—nothing could be more unadvisable, 54-58.

Membership of the University Court



should entitle to life membership of the General Council, 61.

Committee of Council cannot be recognised as representing the Council except in any petition they are presenting, 68.

Faculty of Arts.—A considerable change in course of study and regulations for graduation in Arts desirable, 64.

An entrance examination for the Universities of Scotland is an absolute necessity; and such examinations should be prescribed for the four Universities; should be held throughout Scotland twice a year—in middle of September, and in early part of January, 64.

Alternatives as to examining body—either the four Universities taking it in turn, or delegates from the Universities, or a non-University body, 64.

Entrance examinations should be progressive, both as regards age and subjects of examination; would propose that in the first year it should be compulsory on those under 17 years of age, in the second on those under 19, in the third all under 20, and in the fourth on all persons entering the University either in the Faculty of Arts or Law; the subjects of examination should include Latin, Greek, English, Arithmetic, Algebra, and Elementary Geometry, 64, 68, 71.

Is sanguine that the announcement of such an entrance examination would give great stimulus to higher teaching in schools; experience when regulating a much more difficult entrance examination in University of Bombay, that the effect on the schools was most wonderful, 64–66.

Would publish names of successful candidates, with the names of their schools, distinguishing those who got over 70 per cent. of the marks as 'passed with distinction,' and the others as simply 'passed,' 64.

At present schools furnish students in Faculty of Arts in the following proportions: secondary and various primary schools, about 40 per cent. each, and remainder from normal schools and private education, 72.

The probable effects of examination in its first operation would be to diminish the number of students, 73.

Further effects of proposal discussed, and explanations in support of suggested entrance examination, 74–138.

A change required in length and

arrangement of sessions for the Arts Faculty; would suggest there should be two sessions in Arts, one from 1st October to 20th December, the other from 20th January to 20th May, to be called the Martinmas and Whitsunday sessions, giving about twenty-nine weeks of work to twenty-three weeks of vacation, or six weeks more work than at present; this would also admit of shorter courses of lectures being given, and more of them; the class fees would require readjustment; University Courts of both Edinburgh and Glasgow recently agreed that the fees for Arts classes should be raised from £3, 3s. to £4, 4s. per annum, but would now suggest a total fee of £6, divided in proportion of £2, 10s. for Martinmas, and £3, 10s. for Whitsunday session, 139.

Probable effect of such a change on students discussed, 140–147.

Present session begins 1st November and ends 20th April, with ten days' interval at Christmas, 148, 149.

Present system of study in Arts too uniform; reference to suggestion of Duke of Devonshire's Commission—in concurrence with which, would propose, that general and common studies should be pursued by all candidates, devoting the first two years to Latin, Greek, Mathematics, Natural Philosophy, and perhaps Logic; at end of these two years, or four sessions, comprising eight courses of lectures, would admit students to a first or little-go examination in Arts, which should be a pass, but not an honours examination, after which each student might pursue special studies till the conclusion of the course, choosing between certain fixed subjects. The schools or triposes to be, 1st, Language, Literature, and History of Greece and Rome; 2d, Mathematics; 3d, Sanscrit and Comparative Philology; 4th, Modern History and English Literature; 5th, Social Sciences,—Public Law, Moral Philosophy, and Political Economy; and 6th, Mental Sciences,—Logic, Metaphysics, Moral Philosophy, and the History of Philosophy—all these different roads to lead up to M.A. degree; or, alternatively, after pass examination in Arts, student might elect to go to the department of Science, in any of the subjects of which he might take the Bachelor of Science degree, 150–155, 165–168.

Necessity for passing in Greek in

first examination discussed, and opinion as to substitution of study of French and German for that of Latin and Greek for students taking degree of Bachelor of Science, 156-164, 169.

Opinion expressed against proposal to make Greek optional with French and German in passing through Faculty of Arts, and in going up for Science degree, 170-183.

Among subjects for second examination in Arts would include Modern History, 184-186.

Sees no reason for instituting any new faculties or degrees; nor what would be gained by creating a Faculty of Science, 187, 188, 190.

At one time desired to see the B.A. degree revived, but now thinks the existence of a lower degree generally tends to make the lower the rule and the higher degree the exception; would much prefer to see a little-go established for first Arts examination and leave M.A. as the only degree in Arts. If reintroduction of B.A. degree recommended, would stipulate that it should not confer franchise, because that would take away inducement to persons to go on for the higher degree, 189.

New degrees instituted in the University of Edinburgh since the date of Report of Commissioners under the Act of 1858; degrees of B.Sc. and D.Sc. and a new degree in Law have been instituted; and in Divinity, conditions of B.D. degree were altered, but not a new degree, 191-194, 196, 197.

Has not considered whether present restriction of Faculty of Theology to members of Church of Scotland should be removed, to permit members of other Churches to be admitted as professors in the Faculty of Theology, 195.

Is of opinion that the teaching of History is inadequately provided for in the University of Edinburgh; is altogether unprovided for in the other Universities of Scotland; Professors of History should be appointed in other Universities, and the Professor of History in Edinburgh should be consulted as to the extension of the teaching of his own subject, 184, 185, 198.

Extra-mural teaching. — Considers that the recognition of extra-mural teaching should be extended, under certain restrictions, beyond the Medical Faculty, where it is in use, to all the Faculties; reasons for this opinion;

advantages which would arise; evils to be guarded against; and necessary restrictions to render extra-mural teaching beneficial to both students and professors, 201, 206, 207-215.

Salaries of the professors must be increased before introducing extra-mural teaching in the Faculty of Arts, 202, 203.

Emoluments of professors. — Views with regard to the emoluments and retiring allowances of principals and professors; list of emoluments, including fees, of the professors for 1874-75, 204.

Grounds for opinion that the endowment and fixed income of professors, especially as coming from the State, should be increased; proposed amounts which should be added to the various chairs, 205.

Election of University officers. — Observations on the right of presenting and electing University officers, and the persons who should administer the patronage of appointments in the University of Edinburgh; present constitution of Court of Curators, consisting of four appointed by Town Council and three by University Court, objectionable, but would be above all reproach if two were added to the number, these being appointed by the Court of Session, 216.

Of opinion that the Commission should procure returns from the Universities as to their financial position, and the administration of their property and revenues, in place of oral evidence, 218.

Deficiency of buildings of University of Edinburgh, memorial as to, 219.

On subject of libraries and museums, refers Commissioners to the professors who are curators of the museum, and to Mr. Small, the librarian, as to the wants of the library, 220.

Election of Rectors. — The appointment of Rector by the students does not seem a rational practice, but they have always elected very eminent and fit men, 221.

GRANT, PROFESSOR, Glasgow. — Is Professor of Practical Astronomy in the University of Glasgow, and as such is Director of the Observatory, 3639, 3640.

The Observatory was instituted contemporaneously with the professorship, in the year 1760; brief history of University observatories in

this and other countries, and the work done by them; on witness' appointment to the chair, he instituted, and continues, a course of continuous observations of the heavenly bodies, and furnishes gratuitously a monthly and weekly statement of meteorological information for the Registrar-General, and also transmits daily correct time to the city and port of Glasgow; submits letter to the Lord Provost, detailing what latter duty involves; the Observatory is indebted to the city for the possession of its noblest instrument, the equatorial refracting telescope, 3639-3643; funds for support of the University described; they are very small; in 1865 the College granted £100 a year for an assistant; another assistant is much required, and salary of the present one is too small; having considered the matter well, is of opinion that, including assistance and incidental expenses, as much as £250 additional is required for the proper working of the Observatory; University has made great exertions and sacrifices for the Observatory, in the way of providing five-sixths of salary of professor (£250, and the Crown only £50), besides providing and maintaining the buildings, furnishing instruments, and defraying incidental expenses and assistance, 3644-3646; buildings are in good order and admirably sufficient, 3647-3649; considers present salary of professor, £300 a year, inadequate, and thinks it should be £600, 3650-3652; delivers lectures in the University, about twenty in the course, once a week between December and March, 3653-3658.

Present title of the chair is Professor of Practical Astronomy; has to suggest that, in common with most of such professorships, the designation should be altered to that of Professor of Astronomy and Observer, 3659; was examined as a witness before the Commission on Scientific Instruction in 1872, and desires that evidence to be taken as now read; has, however, in addition, to suggest that chair of Astronomy should be included in the examination for M.A. degree, 3660, 3661.

Course of study for Faculty of Arts.—Considers present course is too heavily loaded in subjects, and that their multiplicity is a great defect in Scottish Universities; two alternative courses proposed and defined

for 1st, 2d, and 3d years,—in one, Classics and Moral Science having the prominence; and in the other, Mathematics and Physical Science, 3662-3664.

New degrees in Faculties.—Sees no object or advantage in having two degrees in Arts, being satisfied with present M.A. degree, 3665-3667.

Entrance examinations.—Is in favour of their introduction; examinations to consist of some very easy exercises in Latin and Greek, and a little Algebra and Geometry; would introduce this gradually, not being too stringent at first; would make this compulsory on all entering for a degree, 3668-3674; would be desirable to have local examinations by examiners appointed independently of the professors, and having no connection with them; such a body might be selected from the teachers of secondary schools; these examinations to be held in four or five centres, one examination at the close of a session, and another before commencement of session, 3675, 3676; certainly prepared to recommend institution of degrees in Science, but there should be no distinction between them and the other degrees; would call them both M.A., 3677-3680; assuming chair of Astronomy to be included in the Arts course, could not propose to give a course of more than thirty lectures; the duties of the Observatory are very laborious; work commences every morning throughout the year at nine A.M., closes at two P.M., open again at six P.M., continuing till 10 P.M., and occasionally until two to three o'clock in the morning; on Sundays same duties must be attended to; from insufficient assistance, witness cannot take more than two or three weeks' holiday, nor can emoluments be added to from outside sources, as is the case with other professors, who have, some of them, five months' holidays, 3681, 3682; is desirous that, as in the case of Oxford and Cambridge, a board of visitors should be appointed by the University Court to annually inspect the instruments and receive a report from the professor, which should be published, 3683-3689; has to call attention to the certificates of attendance which professors give at the end of the course, which are accepted as sufficient by the three Presbyterian

bodies; would have the professors to decline to give any certificate if, upon a fair examination at the end of the course, the student did not make a satisfactory appearance, 8690-8696.

**HARVEY, THOMAS, M.A., LL.D.**—Is Rector of the Edinburgh Academy; was originally a Glasgow student, and went as a Snell exhibitioner to Balliol; is a graduate and M.A. of Oxford, and an honorary LL.D. of Edinburgh University, 11,406-11,411; has had considerable experience of Scotch Universities, having taught the Greek class for part of two years in Glasgow, and the Latin class one whole session in Edinburgh, 11,412, 11,413.

Institution of entrance examinations.—There should be some entrance examination for admission of students; would be prepared to recommend a very moderate one, 11,414-11,417; would confine the examination to the subjects of Latin, Greek, and Mathematics, 11,418; how much of these the candidates should be called on to know described, 11,419, 11,420, 11,434; present examination should be maintained for entry to the three years' course very much as it is, and thinks that no student should be able to pass from first into second class of Latin, Greek, or Mathematics, without passing that examination; has also a desire to see a third examination instituted, for those who have studied Greek or Latin for six or seven years at schools, equal to a pass examination for a degree, by which they would be exempted altogether from attendance at the Greek or Latin class; reasons for this proposal, 11,420, 11,421, 11,427, 11,435; alternative proposal, in lieu of entrance examination, that there should be a compulsory examination at end of first year for those who have gone through junior University classes, as well as for those who come from the country from school, and objections to this plan, 11,422, 11,423, 11,426; believes that if School Boards brought sufficient force upon their masters, each country school would soon be prepared to furnish a class who could pass the entrance examination proposed; this should involve no additional pay, 11,423-11,425; for case of those who come late in life to the University, would have a broad margin of exceptions; would say

that a student above the age of twenty should not be called upon to pass an entrance examination, 11,428-11,433; entrance examinations should take place at the most convenient places—local centres, or the schools themselves; the examiners should be entirely independent—neither schoolmasters nor professors, men like the non-professional examiners appointed by University Court; there should be one board for the whole four Universities; would have examination partly *visd voce* and partly written, 11,436-11,440.

Course of study for Arts Faculty.—For M.A. degree, should insist upon passing in Classics and Mathematics, and then open up a great variety of schools, as at Oxford, 11,441, 11,442.

Institution of new degrees.—Desirable to have a separate degree in Science, to pass same foundation as for M.A., but it would be quite possible to substitute one modern language for Greek, 11,443-11,445.

Extra-mural teaching.—Of opinion that its introduction into Faculty of Arts could not fail to do good; if a certain part of the course, as in Medical Faculty, were taken extra-murally, does not think such an arrangement would lead to a system of 'cram,' 11,446-11,452-11,454; has not had much reason to complain of boys leaving the Academy too soon to go to the University; gives statistics of proportions who leave in the various years' classes, for the University, 11,456-11,466.

**HARVEY, PROFESSOR, M.D.**—Is Professor of *Materia Medica* in the University of Aberdeen, and has been so since 1860, 6668, 6669; had previously held a lectureship on Institutes of Medicine in Marischal College for ten years, and then on Practice of Medicine in King's College for three years, 6670.

Alterations desirable in present course of study in Medicine.—Has to object to his subject—which comprises two branches, Pharmacy and Therapeutics—being thrown into the first examination, on the ground that while Pharmacy and Practical Pharmacy can be taught in the first year, Therapeutics cannot; Sir Robert Christison has stated to witness that the study of this subject is even more advanced than the Practice of Physic, and should properly come after it;

is further of opinion that there ought to be a distinct and advanced class for Therapeutics; at the time the Ordinances were framed, witness wished his subject to be placed in the third professional examination, but his colleagues at that time insisted upon its being put in the first, 6671-6684; they are, however, now at one with him in his opinion, 6727.

New degrees in Medical or Arts Faculties.—No new one required in Faculty of Medicine; but if a degree in Arts of B.A., with a shorter curriculum than M.A., say two years, were instituted, thinks a considerable number of Medical students would be induced to take it, 6685-6687; thinks it would be desirable to introduce summer sessions into Arts department, 6688, 6689.

New professorships.—The Faculty of Medicine are in favour of a Professor of Pathology, but witness thinks that a Professor of Public Health would be of more consequence, unless both are created, 6690, 6703-6709; alternatively, the subject of Public Health, or Sanitary Science, might be combined with the subject of Medical Jurisprudence, the two subjects being made a course of 100 lectures, 6691-6702.

Provision for assistance and apparatus for chairs.—Witness is allowed £50 a year for class expenses, and has an assistant for himself, 6710-6712; number of students attending witness' class are increasing, in common with that of his colleagues, 6713-6716.

Emoluments of professors.—Thinks, in common with others, that the endowments of the chairs are rather small; whole emoluments of witness' chair for last five years have averaged £373; is of opinion this should be increased, 6717-6723; this might be done by increasing endowment from £150 to the same as that of the Professor of Physiology, who gets £200; and if a class of Practical Pharmacy were made imperative, in conjunction with class of Theoretical Pharmacy, and established with a moderate fee, the emoluments would be further added to, 6724-6728, 6731; thinks present fee for course, three guineas, might be raised to four guineas, as in Edinburgh, 6729, 6730, 6732-6735; witness agrees with a scheme brought before him by Sir Robert Christison, that instead of having three profes-

sional examinations, and grouping the subjects,—so many in the first, second, and third,—it would be better to abolish this altogether, and allow any student to come forward at proper academical terms for examination on one or two subjects, after complying with requisite conditions for examination in them, 6684, 6736-6742.

HEDDLE, PROFESSOR, St. Andrews.—Is Professor of Chemistry in the University of St. Andrews, 2060; is a professor of the United College, 2061-2063; attendance on witness' lectures is necessary for the degree in Faculty of Arts at present, but the students have this year petitioned that it may be struck out of the course again, 2064, 2087-2094, 2099-2103; it is not a requisite in any of the other Universities, 2065.

As regards endowments for chair and appliances for the study of Chemistry, witness has to adhere to the evidence given by him before the Royal Commission on Scientific Instruction, with a few modifications, 2066, 2067.

In the statement lodged before the last Commission, the emoluments of the Chemistry chair are not correctly given, 2068; further, has to complain of having been charged with expense of gas used for lighting and experiments in laboratory, to defray which the sum allowed for maintenance of apparatus and substances must be further augmented, 2071, 2072.

With reference to proposed connection between St. Andrews and Dundee, witness last winter delivered a course of lectures in Dundee, which were well attended; they were illustrated by experiments, but there was no attempt at practical teaching of Chemistry, 2073-2079; general statement on proposed scheme for a Science curriculum in Dundee in connection with St. Andrews University, and opinion of witness as to its practicability, 2080-2088, 2095-2098, 2104-2112; contemplated continuation of lectures in Dundee considered, and difficulty on part of witness, without personal loss, to continue his course, as compared with Professors of Physiology and Natural History, 2106-2119, 2124, 2126; have no Medical school in St. Andrews; witness has been twenty years in St. Andrews, and during that time there has never been a Medical student, 2113-2119;

University can give an *annus medicus* by a student attending on course of Professor of Medicine and that of Chemistry, 2120-2123; but Anatomy cannot be studied, 2127, 2128, 2179; opinions generally on course of study and regulations for graduation in the Faculty of Medicine, and faulty nature of present system of graduation, 2129-2135; would abolish present, and rather go back to old system, as existing before 1862; or, alternatively, abolish the giving of the Medical degree altogether, and give St. Andrews some compensation, 2136, 2137; description of what witness considers abuses of the system during Dr. Day's time, especially with reference to students from England and Ireland, 2139-2153; by making pass for degree competitive, might improve quality of examination, 2154; witness' opinion as to Medical examination at St. Andrews agrees very much with that adopted in a report by the visitors from the General Medical Council; puts in report in question as part of evidence, 2154-2156; nature of provision for maintenance and supervision of museum, 2157-2162; reasons for bringing forward evidence as to chair of Medicine, 2164.

Constitution and powers of University Court.—Thinks local influence is at present too great, and would suggest, as Medical influence is now too strong, that if the General Council had three assessors, on condition that only one should be a Medical man, the necessary change would be secured, 2164-2170.

Functions of General Council.—At present, changes in regulations adopted by the Court or the Senatus are, after approval only, intimated to the General Council, leaving them no power to approve or disapprove; would certainly add, 'with a view to their expressing their opinion,' 2170-2175.

New degrees.—If it is wished to continue St. Andrews as a University, a new Science Faculty should be instituted, either there or in Dundee, 2176.

Length of University sessions.—If any change, would be advisable to commence in October—a month earlier, 2176, 2177.

Extra-mural teaching.—Thinks that in St. Andrews some steps should be taken to recognise French, German, and other Modern Languages, 2178.

Financial position of University.—

Thinks Government should take lands from University and give the professors fixed salaries, 2178, 2179; this would remove only argument for the anomaly of having a double principalship, 2179.

Provision of apparatus, etc.—Though witness is giving lectures on Practical and Analytical Chemistry, there is no laboratory in the University, 2179, 2180.

HODGSON, PROFESSOR.—Is Professor of Commercial and Political Economy and Mercantile Law in the University of Edinburgh, 11,702; chair has existed for six years, and witness is the first professor, 11,703-11,706; the chair was founded by the Merchant Company of Edinburgh; salary £450 a year, with class fees, £24 for prizes, and £50 for class expenses, 11,707-11,710; chair was accepted by authority of the Senatus, 11,711-11,713; the attendance during the six sessions has amounted to above 300, the annual numbers having varied; memorandum of Merchant Company having suggested hour for lecture should be before or after business hours, the hour from 9 to 10 A.M. was first tried, but is now changed to from 5 to 6 P.M., 11,714-11,719; subjects of lecture are: Political Economy—pure economics; Commercial Economy—commerce, the history, details, practice, and mechanism of commerce; and there is Mercantile Law; attendance upon the class being entirely voluntary, and Arts students being fully occupied with other subjects, the chair has been at a disadvantage, 11,720-11,734; class fee is three guineas; of opinion that for those who attend no other classes, the matriculation fee of £1 is too much; would be an advantage, if, as in Owens College, it were reduced to five shillings; would extend this rule to attendance on any one class in the University, but exempting these from the privileges which matriculated students enjoy, 11,721-11,723, 11,734; would be a great improvement if subject were made even an optional one in Faculty of Arts, 11,724-11,726, 11,734; in interests of the subject of the chair, has to call attention to the necessity for rendering the study popular and accessible, by making quotations showing the dissemination of anti-economic principles, from

Mr. Ruskin's *Fors Clavigera*, and from works by Mr. Haalam and the Rev. W. Headlam, 11,727; the Senatus, with approval of University Court, have passed a resolution entitling students of Moral Philosophy class to attend two days a week, or five days a fortnight, for the reduced fee of two guineas, 11,727-11,783; Professor of Moral Philosophy has, since institution of this chair, given up lecturing upon Political Economy, 11,740.

INNES, ALEXANDER TAYLOR, Advocate.—Is a Master of Arts, and as such a member of the General Council of Edinburgh, 1270-1272; has attended meetings of Council regularly, and has found average number attending to be between forty and seventy, out of the total number of above 2000 members, 1273-1278.

Alterations in functions of General Council.—Has for several years been a member of a committee of the Edinburgh General Council, which reported upon and had to deal with the matter; and has also acted as secretary of the committee of the four Universities which dealt with it; hands in to the Commission, under the instructions of a committee of the Council, a list of representations and resolutions on the constitution of the University, its organs and their powers, and upon any proposed changes or amendments of the same, collected from the minutes of Council from 1859 down to 1876, 1279, 1280; another Committee of the General Council of Edinburgh, of which witness was a member, was appointed in 1870, and consisted of twenty-one members (names given), of these, five were about the average who were usually present at a meeting, 1280-1283; terms in which said committee was appointed, 1284; a report presented in October 1871, in which two general conclusions were stated: (1) that the influence of the Council ought to be increased in the University constitution, and (2) that its representation in the University Court ought to be increased; another report was brought up in October 1872 (copy of which produced to Commission), and four principal recommendations therein, read, 1284; said committee were further authorized by Council to meet with and form a joint-com-

mittee with committees from the other Universities of Scotland; conclusions arrived at by these representatives of different Councils, as stated in a report by Edinburgh Committee to their Council in April 1874, read, 1285, 1286; further extract of a report by the committee on 20th October 1874; committee discharged in April 1875, 1287; this committee had two purposes, the one to look after the interests of the Council if a new Bill should be introduced, and the other to prepare and mature matters in the event of a Bill not being introduced, 1290-1292; the report presented to Council on 25th October 1872 very much embodies witness' views of what should be done, 1289; respecting first head of report, that the General Council ought to have power of meeting between the half-yearly statutory meetings, witness does not think that, ordinarily, there would be any great advantage in meetings *pro re nata*, 1293-1297; as to second head, that the power of the Council to appoint committees should be recognised, witness has to state that he does not propose that the Council should have the power of delegating its powers to any committee, but would allow appointment of a committee to arrange the business for the next meeting, 1298-1303; further observations as to powers to which committees should be restricted, 1304-1310; on the subject of the fourth head, that no deliverance of the Court should issue or have power until either (1) it has been approved by the General Council, or (2) the Court should have taken into consideration any representation by the Council to the Court on the subject, witness is of opinion that it would not be safe to take the first of these alternatives, as being too great a clog on the Court, 1311-1313; the whole object of this fourth head is to make provision of this fourth head is to make provision of section 12 sub-section 2 of the statute more clear, 1314-1318.

Representation of Council in University Court.—Thinks that it might be increased by giving three assessors to the Council in the Court, 1319, 1320.

Functions of General Council.—Of opinion that the Council should have the power of vetoing the creation of

a new chair, 1822-1825; desirability of the Council having any proposal for a new and permanent application of the funds of the University brought in some way under its consideration for investigation, and grounds for this conclusion, 1827-1842; referring to the question of how far the General Council represents the University, witness considers that the University includes professors and graduates, and not only existing teachers, 1843, 1844, 1847, 1848; has, further, no doubt that inquiries of Commission will show a very general consensus of feeling now among the University Councils of Scotland in favour of their having a more potential voice in the constitution of the University, 1845; as to election of Rector, considers it desirable that students should have that sort of voice in the governing body of the University, 1849; comment on, and discussion of, difficulties attendant upon witness' proposal to add to present deliberative functions of the Council any special power, 1850-1860; conviction of witness that the addition of two representatives being given to the Council might make the University Court too large, but hesitates to say whether the academic or civic element should be diminished, 1861-1866; thinks it a hardship that the University funds should be drawn upon for the election of assessors, 1867-1871.

Extra-mural teaching in the Faculty of Arts.—Witness favours the proposal that all extra-professorial teaching, whether extra or intra-mural, should be by academical teachers, i.e. graduates of the University, or possibly of a Scotch University; the question of basing the privilege upon the brotherhood of Universities, and recognising English graduates as eligible, may be made a subsequent question, 1872, 1873; several advantages of the scheme—1st, it would fill up gaps in the teaching, by adding to subjects and sciences represented in University; 2d, it would attract to every University town the ablest and most rising men in every department of science; 3d, it would open a career to men of learning, science, and thought; 4th, it would stimulate and supplement the teaching of the professoriate; further general consideration of the question, 1873, 1875, 1876; no reason why extra-mural teaching should

not be extended to Faculty of Law, regard being had to the matter of endowment, 1874; there should be additional endowments to all chairs preliminary to the introduction of open teaching in their subjects, 1878-1890; as a general system, open teaching might be safely introduced, provided one-half of the present average income of the chair were secured to successor by endowment, 1893-1898; number of extra-academical teachers should be limited, 1891; and student should only be allowed to take a certain number of his classes from extra-mural teachers, 1892.

IRVINE, REV. W. F., M.A., Arbroath.—Is minister of the parish of Arbroath, 9859; a graduate and a Master of Arts of the University of Edinburgh, and as such a member of General Council, 9860, 9861.

Regulations for graduation in Arts Faculty.—A great improvement would be to add to present course of study one or two classes of Natural Science, 9862, 9871; probable advantage which would arise from the change, especially to students of Divinity, 9868-9870; admits necessity that young men preparing for any profession should know French and German, 9872.

Institution of entrance examinations.—Is of opinion that entrance examinations should be instituted; would make them progressive, and introduce them gradually; subjects which should be included, 9873, 9874, 9420-9423; letter from President M'Cosh of Princeton College, New Jersey, written to witness on subject of entrance examinations, 9424; amateur students and men of a certain age entering University late in life should be exempted from examination, 9875, 9877, 9879; would not abolish junior University classes at present, leaving them open to such as prefer them to secondary schools, but attendance not to count as part of the curriculum until entrance examination is passed, 9876-9884; would have these examinations conducted by the gentlemen who assist in the examinations for the degrees, 9886; looks to secondary schools as able to prepare young men for such entrance examinations, but of opinion that parochial and primary schools are now unable to do so, the younger class of teachers being quite incompetent to do so, 9887.

Length of University sessions.—



Considers session too short, and as requiring considerable extension; would like to have a session of virtually nine months, commencing first Monday of October, to last to close on Christmas, then a few days of recess, again from January to end of March, another short recess, and a session from May to middle of July, 9388, 9399; such an arrangement already exists in the German Calendar, 9425-9427; were such a system adopted, would propose to add a third to the emoluments of the professors, which might partly be provided by endowment and partly by raising the fees from three to six guineas a term, and would not consider this latter arrangement unjust to student, 9400; an alternative, to which, within witness' knowledge, a considerable number of the professors would be agreeable, might be found in lengthening present session by commencing early in October and continuing to end of April, 9412, 9418.

Bursaries in connection with secondary schools.—Would be of great advantage to the country; might be held both by boys at school and students at the University, but would give preference to the schoolboy class of bursaries, 9407-9411.

Creation of new professorships.—Would like to see a Professor of Natural Theology and Christian Evidences, separate from present chair of Theology, also a chair for Pastoral or Practical Theology, 9414, 9415; witness would have no objection to throw open chair of Theology to members of all the Presbyterian Churches, 9416, 9417; would, however, strongly object to another proposal to transfer all the Theological chairs to the hands of the Church, 9418, 9419.

**JEBB, PROFESSOR.**—Is Professor of Greek in the University of Glasgow, and only in his second session, having been appointed in 1875, 10,963, 10,969; witness was educated at Cambridge, where he was Senior Classic of his year; was also a Fellow of Trinity, and at one time Public Orator of the University, 10,965-10,968.

Evidence as to attainments of Glasgow students in Greek on entering the class, as shown by answers to class examination papers on Greek grammar, and tables showing marks obtained by different classes; impression of witness, founded on these re-

sults, is, that the students entering junior Greek class at Glasgow at present come very imperfectly prepared, except where they have been at good secondary schools, and that an entrance examination in Greek is at present wholly impracticable, as it would necessarily exclude great majority of students; witness sees no objection to students, situated as are the majority of Scotch students, beginning Greek at the University, 10,970, 10,971, 11,044.

Course of study for graduation in Faculty of Arts.—The pass standard for M.A. in Greek is lower in Glasgow than that at Cambridge or at University of London for B.A. degree; but impression of witness is, that a higher standard for Glasgow is impracticable, and must remain so until a change takes place in the general teaching of Greek throughout the schools of Scotland, 10,971-10,973; with regard to curriculum for degree of M.A., witness does not see his way to suggest any change in it, although he is dissatisfied with the standard both of the pass degree and of the honours in respect of Greek, 10,989-10,991; sees no objection to optional courses of study for the M.A. degree, but has no specific suggestions to offer, 10,992-10,995.

Institution of new degrees in Arts.—In the event of the B.A. degree being reinstituted, witness would be sorry to see Greek omitted from the course; was examiner in Classics in the University of London for three years, and is of opinion that the curriculum there for B.A. offers many valuable analogies; description of requirements there in Latin and Greek; anything less in culture would make the degree a failure, as it would not be sought by those who desire a degree, 10,973, 11,011-11,016, 11,079; proposed curriculum, if instituted, 11,080; has no hesitation in saying that the effect of such a revival of B.A. would unquestionably be to deter men from going on to the M.A. degree, 11,081, 11,082; definition of attainments required for M.A. degree in the University of London, 10,974-10,979; average number of candidates for the B.A. degree in that University, 10,980-10,984.

Assistance to Professor in Greek chair.—The Greek class has four hours a day on every day except

Saturday; of these twenty hours, the practice is, that the professor takes fourteen hours, and the assistant six; witness tests progress of all the classes by occasional written examinations, 10,985; has only one assistant, for whom there is an allowance of £100, 10,986, 10,987.

Length of sessions.—Has nothing to say as to any change; remarks upon the relative merits of the English and Scottish divisions of the academical year, 10,987.

Extra-mural teaching.—Belief that at present the tyranny of examination does not dominate the teaching; while, if extra-mural teaching was established, the immediate object of the teacher would be to get his men through the examination, and a complete mechanism of cram would be developed, which would be a temptation to the intra-mural teachers to do likewise, and lower the quality of the University teaching, 10,987, 10,988; comparison with private tutor system at Cambridge, 11,008, 11,009; the system appears inapplicable to the Universities here, 11,010.

Secondary schools.—Although witness admits that at present a great deal depends on the University teachers, he sees no mode of elevating the standard of instruction in the Classical department, except by the improvement and creation of secondary schools, 10,996, 11,047, 11,050; is doubtful whether, if the standard in Greek for M.A. degree were raised, men would be found to come up to it, 10,997–11,000; of opinion that the effect on the study of Greek in Scotland; if the language were abolished from the compulsory part of the curriculum, would be to extinguish the study of Greek, 11,001–11,007, 11,087.

Propriety of introducing an examination in English, Arithmetic, and Elementary Mechanics into the Arts Faculty discussed; also as to whether, after first year, students might not be allowed to choose different schools for their degree, 11,088–11,048.

Entrance examinations.—Witness is opposed to an entrance examination being instituted at present; in Greek it is wholly impracticable, owing to insufficient number of secondary schools, 11,044–11,047, 11,061; sees no objection in itself to

a professor superintending, as witness himself does, instruction in the rudiments of Greek, and would rather have a good boy who knew nothing than one badly grounded, as they are at half the places now called secondary schools, 11,048–11,051; further, it is important that no obstacle should be placed in the way of entrants to Scottish Universities, the latter having been one great means of sifting out men of ability from all classes of the population, in this respect playing a part which the English Universities have not done for the last two centuries, 11,052–11,055; approval of the alternative of an examination at end of first session or beginning of second; and if student failed, to give him six months to come up again at the beginning of next term, the period spent at the University to count as part of his time there, 11,056; of opinion that Universities in the position of Oxford and Cambridge in England, and the Scottish Universities, should not give degrees in Medicine without their graduates being possessed of a certain amount of the two languages of Greek and Latin, 11,064–11,078; particulars relative to and comments upon the standard of the German Universities, and probability of British Universities attaining the same standard considered, 11,087–11,098.

Prize essays at Glasgow.—In many of the classes, prizes are given, and there are some University prizes; there is a considerable competition, 11,094, 11,095; the system still exists of allowing the ordinary class prizes to be decided by the votes of the students; witness disapproves of the system, 11,096, 11,097.

Age of students entering the Greek class.—The youngest of this year is 15, and the oldest 32, while witness thinks the majority range from 17 to 22 or 23, 11,098, 11,099.

JENKINS, PROFESSOR FLEEMING.—Is Professor of Engineering in the University of Edinburgh, and was appointed in 1868, 7948, 7949.

Course of study for graduation in Faculty of Arts.—Witness' chair belongs to Faculty of Arts, and he is satisfied with the regulations made for the course of study for Engineering students.

New Faculties or degrees.—Is averse to the creation of a Faculty of

Science, and sees no necessity for its institution, 7950-7952; the University degree in Engineering is one of the Science degrees in Edinburgh; it has been useful, and has stimulated study among the students, 7953, 7954; there are several degrees in Science granted by the University, with special curriculums for each; a man may take his degree in Natural Science, or in Engineering, or in Mental Science, 7955-7957.

Entrance examinations.—Confining opinion to his own class, witness would deprecate any entrance examination; such would shut out some very hard-working students among skilled artisan class, 7958-7961.

New professorships and lectureships.—There are several obvious openings in the Universities for new chairs; would mention, for instance, Modern Languages; desires specially, however, to draw attention to the class of Mechanical Drawing, established by witness, and taught by his assistant; the assistant was asked for solely with a view to teaching that class, and the grant allowed by University for such assistant, £40, helps witness to pay him; in view of the eminently useful nature of this class, is of opinion that a lectureship of Mechanical Drawing is really necessary; witness would suggest that if such were established, it should receive a salary of say £120, or an endowment of say £100 and fees; would further suggest that the lectureship should only be tenable for five years; outline of proposed duties, 7962-7968, 7970-7972; witness has a class of Practical Surveying, another voluntary class he has instituted; this is either taught by himself or, in his absence, by the assistant, 7969; class of Engineering generally consists of about thirty students, 7973-7976.

Provision of apparatus.—Has a small fund of £40 devoted to class expenses and preparation of models and apparatus, but that sum does very little; witness, however, would consider it a waste of public money to ask the Commission to make any addition to that sum for the museum of models, etc., properly required, when there is the Museum of Science and Art within 300 yards of his class-room; at first, witness, through courtesy of Mr. Archer, was allowed to borrow, for purposes of class instruction, any

articles required for lectures, but that privilege was, by an order from headquarters in London, withdrawn; witness, however, has to ask the Commission for the privilege being accorded to him of having the right of suggesting to the director such articles as it would be useful for him to acquire, with a view to increasing the usefulness of the Museum to the University, 7977-7984.

Extra-mural teaching.—Has not the slightest objection to extra-mural teaching, worked under the supervision of the University Court, being made to qualify for a degree, 7985, 7986.

University buildings, libraries, etc.—Condition of class-room is very bad; no special appliances for showing experiments, nor for showing diagrams, and everything has to be cleared out at end of each lecture, other two professors using the same room, 7987-7993; the want of retiring places for the students, and of conveniences for decency, is shocking, 7994-7998; has to call attention to the want of funds to obtain the necessary periodical literature required in subject of Engineering; a proper supply of these would be most directly beneficial to the class; £100 could be spent with advantage, but about half that sum would provide ten most important periodicals; they would go into the general library, 7998-8006.

JOHNSTON, R. BRUCE, W.S., Edinburgh.

—Is a Writer to the Signet, in practice in Edinburgh, 10,626.

Has been secretary to the Curators for Administration of Patronage in the University of Edinburgh since 1865, when he succeeded his father in the office, who had held the office from the origin of the Court in 1858, 10,627, 10,628; amount of patronage in hands of Curators described, 10,629, 10,630; number of appointments by Curators during nineteen years the Court has existed has been nineteen; analysis of whether these were unanimous or the reverse, 10,631, 10,682-10,685; when a vacancy occurs in a chair, the patronage of which is in the Curators, the first step is to call a meeting; here witness has to point out that Act of 1858 is defective, in so far that there is no form prescribed for intimating vacancies to the Curators when they occur, hence occasional trouble and

delay has arisen, 10,645-10,648; general rule now is, to fix time of election at first meeting after vacancy, and hold no intermediate meeting between then and the election; formerly, under a programme drawn up at a meeting in 1864, it was arranged that there should always be an intermediate meeting held to exchange opinions on the various candidates (resolution in question read), 10,649-10,659; candidates do not send in applications to witness as secretary, but apply to Curators personally, and sometimes a good deal of canvassing goes on, 10,660-10,679; considers that there should be an intermediate meeting for an interchange of opinion between the first meeting and the election.

Mode of election.—It is not only the votes of members present that are counted, but those of absent members also, who vote by letter; there is no quorum fixed by the Act; the minute of 1864 provided that at least four should be present; is most desirable to have some regulations for action of Curators upon a vacancy occurring, and thinks that if these rules were made upon the terms of such a minute as that of 1864, they would amply suffice, 10,671-10,681; a difficulty arose in the case of the chair of the Practice of Physic, which may in some other case arise again, as to whether, when a vacancy occurred, the University Court had power to alter the constitution and duties of the chair, and if so, to ask the Curators to delay filling the vacancy while the matter was being considered, 10,686-10,690; the office of witness is an honorary one, 10,691.

**KELLAND, PROFESSOR.**—Is Professor of Mathematics in Edinburgh University, and has been so for thirty-eight years, 4448-4450.

Functions of General Council.—Is disposed to think that a little modification, reducing the limits of the powers of the Council, might be desirable; they have at present too much inducement to ventilate views of reform which it would be better to leave to a smaller body than the General Council, 4452-4461; they should have no power to suggest changes in our system, 4462; grounds for this conclusion, 4463-4470; would leave the Council their present powers of electing a representative to Parlia-

ment, and of electing the Chancellor of the University and their assessor, 4471, 4472; has not thought of the proposal that they should appoint two assessors to University Court; it might possibly be a proper thing to do, 4473.

Course of study and regulations of graduation in Faculty of Arts.—Has considered these very attentively, and has come to think that it would be very unwise indeed to modify to any large extent the system of graduation for the M.A. degree, and reasons for adhering to present system, 4474-4482; is disposed to think that something should be done to render a degree in Science more acceptable, rather than, as has been proposed, make separate options for taking the degree of M.A.; thinks this might be effected if a degree in Science were subject to the conditions of combining Languages and Science, —Natural History and Chemistry, for example,—and calling it a degree, not in Arts, but in Science; would thus put the Bachelor of Science on the same footing with the Master of Arts, 4483-4498, 4501-4504; witness' view as to amount of culture which would be necessary for Bachelor of Science in the Arts department would be to the extent of one class in each of the three departments for M.A. degree, viz. Languages, Philosophy, and Mathematics, 4499, 4500.

Institution of new Faculties or degrees.—With reference to proposal to institute a degree of Bachelor of Arts, witness is not strong on the point, but thinks it would be the best way to give entrance to Medical Law and Divinity Faculties, and that, if instituted, a great number would take advantage of that purpose, 4505-4507; would require for this degree attendance during two sessions, and on four classes; of these, three Arts courses—one in Languages (Greek being optional), one in Mental Philosophy, and one in Mathematics; the fourth subject might be a Modern Language, but that witness leaves to consideration of the Commission, 4508-4519; would not give franchise to degree of B.A., 4520, 4521; it is almost necessary that there should be a separate Science Faculty and Dean to work out the Science degrees properly, 4522-4529.

Entrance examinations.—Is averse

to a real entrance examination—that is, a *sine quâ non*, without which the student could not enter the University; grounds for this opinion, 4530–4538; conclusion that witness would not recommend the institution of such an examination at all, 4539.

Assistance to chairs.—Assistance to chair of Mathematics very much required; witness has about 140 students in junior class, and in the second 110 or 120; at present there is one assistant, and witness thinks one more would overtake the work, 4540–4543.

Emoluments of professors—emoluments of chairs in Faculty of Arts.—Witness has been perfectly satisfied with his emoluments for the last dozen years; is also of opinion that the income of a professor should depend largely upon the extent of his fees, 4544, 4545; the incomes of professors in Arts Faculty are about as follows:—Moral Philosophy, £800, Greek approaches £1000, and Latin and Mathematics each exceed £1000, 4546–4549.

Extra-mural teaching.—Hardly thinks its recognition in Faculty of Arts is desirable, 4550–4556; consideration of argument that such teaching might be desirable when a professor has lost the power of teaching and does not know it, 4557; other means, by pensioning off a professor, would be preferable; and a modification of present system, which would be proper, would be to require that the Senatus should combine with the University Court and concur in such action, making it binding on the professor, 4557–4569.

Appointment to bursaries and scholarships.—Exceedingly desirable that all endowments should be in the hands of the University, and should only be given on a special examination; many excellent private bursaries exist, but the best endeavours of the University to get the patrons to hand them over have failed; thinks that if the Commission issued a circular to private patrons, asking them to hand over their bursaries for public competition, some effect might be made upon them; a good many of these bursaries are in the hands of municipal corporations, 4571–4580; thinks, in the case of fellowships, that it would be hard to ask

teaching in the University from the fellows, 4581–4583.

KERR, JOHN, M.A. — Is a Master of Arts of the Universities of Cambridge and of Glasgow; was at Trinity, Cambridge, 8772–8775; is senior inspector of schools in the northern division of Scotland, 8776.

Course of study and regulations for graduation in Faculty of Arts.—Would not alter the M.A. degree beyond giving a choice between Senior Mathematics and some Natural Science, 8777–8781, 8807.

Institution of new Faculties or degrees.—Would like to see the B.A. degree revived, 8782, 8783; classes which candidates for B.A. should take are, Latin, English, and Junior Mathematics, then either Logic or Moral Philosophy; Greek should be alternative with a fairly testing examination in French or German, 8784–8795; thinks that if B.A. carried no vote in the Council, its institution would not diminish number going forward for M.A., but that it would feed M.A. degree, 8796–8799; masters of the higher schools should take the M.A. degree, and for teachers of elementary schools, B.A. would be a distinction, for which a certificate would not be equivalent, 8800–8806; for degree of B.A., a three years' attendance would be necessary, unless for candidates who could pass the first year's course by examination, as at present, 8785; would institute two degrees in Science, B.Sc. and D.Sc.; has not thought out the amount of literary culture which should be required, but would insist on Latin, and dispense with Greek, 8811–8814, 8818; would require attendance on classes, 8815, 8816, 8820; does not give any opinion as to what the qualifications should be, except that there should be a really testing examination, beyond the limit of mere 'cram,' 8817, 8819; it would be desirable to have a separate Faculty of Science, for the purpose of degrees of B.Sc. and D.Sc., 8810.

Entrance examinations.—Desirable to introduce, but would require to be very easy at first, and not to the exclusion of teaching; would only make it serve as a bar against graduation until it was passed, 8823–8827; alternatively, has to recommend that

students who have attended junior classes of first year, might at beginning of second year pass the same examination as that for the three years' course, 8828; University junior classes must at present be kept up from want of secondary schools, and until that defect is otherwise supplied cannot be abolished, 8829-8839; at present, schools cannot compete with junior University classes, because (1) the class of men in rural schools are not competent to teach Latin and Greek very far, and (2) the operation of the Scotch Code is adverse to such teaching; the schools subsidised by the Dick Bequest, which used to teach Classics, have substituted Botany and Physiology, which can be ground up in a month, and which are paid at the same rate as Latin and Greek; secondary schools will never supply the vacuum thus created in rural districts, 8848; suggestion of a system of parish bursaries to bridge over gap between schools and Universities, 8849-8857; is disposed to have more departments for honours, and would add Natural Science and Law, or Law and History joined, 8861-8864; how this should be accomplished, 8865-8871; objections to degree of B.A. discussed, 8872-8880.

Length of sessions.—Does not think they should be altered, 8881-8897.

New professorships or lectureships.—Thinks classes in Glasgow are too large for one man; would procure assistance by attaching condition to lecture or teach to all fellowships of, say, £150 a year, 8898-8901; in Latin class, where there are no fellowships, would give assistants, 8902.

Extra-mural teaching.—Would be very much opposed to its introduction on the same lines as in Faculty of Medicine, 8906; it would tend to produce 'cram,' and tempt the professor, in self-defence, to do the same, 8907-8913; if a professor was not very efficient, would remedy that by assistance from within, 8914.

Retiring allowances of professors.—Would make these so attractive that a man should be induced to retire after twenty-five or thirty years' service; and University Court should have power to cause a man to retire at a certain age, 8916-8918.

Bursaries and scholarships.—Would make all freely and openly competitive, as far as that can be done, 8919-8924; more bursaries are required in Glasgow for poor lads coming from rural districts, 8925, 8926; considers recently founded scholarships and fellowships, open to students who have taken their degree in Arts, are very beneficial, as encouraging the higher learning, 8932-8941; superiority in effect of competition as compared with presentation bursaries, 8942-8945; matters which require adjustment in the preliminary Medical examination; in Glasgow, the payment of the fees of the examiners, and the control of the examination is not fully in the examiner's hands; witness speaks from experience, having been three years examiner in Glasgow, and three years in Edinburgh—these remarks have no application to Edinburgh, 8946-8959, 8963-8966; nor any reference to witness' work as an examiner in Arts, 8960-8962.

Entrance examinations.—Wishes to add that in entrance examination for curriculum of Arts it would be necessary to exempt men of twenty years of age for some time, and reasons for this opinion, 8967; examiners ought to be able to indicate pass men by mark, to distinguish those who passed well from those who just scraped through; at present they are arranged alphabetically, 8968, 8972, 8974; would have at least three classes in honours, 8973, 8975.

KIRKWOOD, DR. ANDERSON.—Is a Doctor of Laws of the University of Glasgow, and was Professor of Conveyancing in that University for five years; has been a member of the General Council since the passing of the Universities Act; has been assessor in the University Court from 1867, and has acted as secretary since 1874, 10,692-10,698.

Constitution of University Court.—Is in favour of an addition of two to the University Court, by giving one member additional to the General Council, and adding the Lord Provost of Glasgow; failing this, would reduce the quorum of present Court to three, 10,699, 10,677 (see pp. 378, 379, vol. ii.); does not approve of proposal that Senatus should have

increased representation in University Court, 10,678-10,680 (see p. 379, vol. ii.).

Constitution and powers of University Court.—Meetings of Court are summoned by the principal through the registrar; have no stated meetings, 10,681, 10,682; thinks the powers of the Court should be better defined, particularly in regard to cases where proceedings are taken against professors, 10,683; grounds for the conclusion, 10,684-10,687; further of opinion that, in cases under the Representation Act, where decisions of Court are by three as a quorum, there should be an appeal to the judges of the Court of Session, 10,688-10,693; duties of clerk of Court are very heavy, and witness thinks that, if University could afford it, there should be a salary of about £50, in which case witness would resign, 10,694-10,702.

Functions of General Council.—Of opinion that present powers are too meagre; would give Council power of adjournment for say a week, and to appoint special committees, with the power only of investigating, reporting, and maturing business, 10,703; would not further increase powers of General Council as by veto or otherwise, 10,715-10,717; also disapproves of proposal that Council should have three assessors to University Court, 10,718-10,721; does not think that in any University voting by proxy should be allowed in the election of professors, 10,722-10,727; objects to University Court sitting with open doors, except, perhaps, on occasion of questions under the Representation Act, 10,728-10,781.

Course of study and regulations for graduation in Faculties.—Has only to call attention to the words of Ordinance 18, section 2, at the end, which says: 'Provided also that no student shall be admitted to a degree in any University unless he has given attendance in such University during the last two sessions of his course,' and would suggest that the words 'the last' should be struck out, and that any two sessions of attendance at the qualifying University should be sufficient, 10,782-10,785.

New Faculties or degrees.—Has nothing to say on that point, except to observe that Law students think

that they should be admitted as law agents when they take the B.L. degree; this, however, is a matter for the Court of Session, 10,736-10,738.

Entrance examinations.—Is decidedly in favour of entrance examinations in Latin, Greek, and Mathematics; considers professors waste their time in teaching the elements instead of higher education in these branches; deficiency of secondary education is in the way, and entrance examinations would require to be very gradually introduced; would make an exception in favour of students of advanced age, 10,739-10,748.

New professorships or lectureships.—Speaking only with regard to Legal Faculty, to enable students of Law to take the degree of LL.B. in Glasgow, without requiring to go to Edinburgh, it is desirable that new chairs of Public Law, Constitutional Law and History, and of Civil Law, should be created; alternatively, it might be more expedient to begin with lectureships of, say, £100 a year and fees, 10,749-10,758, 10,761-10,764; at present, Professor Berry teaches Civil as well as Scotch Law, but witness is of opinion that Scotch Law is so wide a subject that the professor should be at liberty to devote his whole time to it, 10,759, 10,760.

Provision of assistance and apparatus.—Does not think there is at all sufficient provision, 10,765, 10,766.

Length of University session.—Present duration of session is most suitable, 10,767, 10,768.

Extra-mural teaching.—Thinks it creates a healthy competition; sees not the least objection to its adoption in any Faculty, under proper restrictions, 10,769-10,775; would not extend the portion of the course in Faculty of Medicine which may now be taken extra-murally, 10,776, 10,777.

Election of University officers.—Thinks that election of Rector by nations should be abolished, and a vote by general poll established, 10,778-10,780; would make no change in other elections, 10,781.

Emoluments and retiring allowances of Glasgow professors.—Are very far from adequate in many cases, 10,782; emoluments would be best increased by additional endowments; objects to an increase of fees;

thinks no professor should have less than £500 from endowment and fees together, 10,783-10,786; thinks that before claiming retirement a professor should show that he is to a certain extent disabled; and that to provide for cases of disablement by sickness, retiring allowances should be more adequate, 10,787-10,793.

Appointment to bursaries and other foundations.—The mode of appointment is quite satisfactory, so far as they are competitive, and of opinion that presentees to bursaries should also be subjected to an examination, 10,794-10,798.

Financial position of the University.—Statement as to financial difficulties of the University of Glasgow at present time, 10,799-10,810.

**KNIGHT, PROFESSOR.**—Is Professor of Moral Philosophy in the University of St. Andrews, and was appointed in the present year; previously held a ministerial charge at Dundee; is a member of the General Council of St. Andrews, 8006-8009.

Establishment of a Science College at Dundee in connection with St. Andrews University considered and discussed; Science classes which might be transferred to Dundee; suggested scheme for the classes, and curriculum necessary; bearing of instruction in Dundee College upon obtaining of degrees; how professorships, lectureships, and provision for necessary apparatus might be arranged, 8010-8023, 8052-8055, 8089, 8097-8099, 8100, 8101; success of course of Science lectures delivered last winter in Dundee by professors of St. Andrews, 8024-8031; probable effect of creation of a College in Dundee upon Arts classes in St. Andrews, 8032-8034; probable amount of support in the way of funds and buildings which would be given to the scheme by the public of Dundee, 8035-8045; three new chairs, besides those transferred from St. Andrews, would be required in Dundee, viz. Engineering, Experimental Physics, and Biology, 8090-8093; witness further thinks there might be tutors in Dundee for classes in Latin, Greek, and Mathematics; attendance on these not to count as University attendance for M.A., but to prepare students for entry on the second year of Classical

studies at St. Andrews, and so shorten curriculum for degree of M.A. or B.A., 8046-8049, 8090; estimate of probable expense for other professorships and tutorships proposed to be established, in addition to the chairs transferred to Dundee from St. Andrews, 8056-8058.

Appointment to bursaries.—Twenty foundation bursaries at St. Andrews, in the gift of the United College, are all awarded by competition; additional bursaries, in gift of the Senatus, are much required; presentation bursaries are given by the patrons without any examination on the part of the College, 8060-8068.

Institution of entrance examinations.—Would not admit to the first class without an examination; is further of opinion that secondary education is sufficient to provide the necessary proficiency to enable entering students to pass, 8069, 8072-8074; on entering second year's class, would submit all applicants, whether from first year's class or coming fresh to University, to an examination, and would raise it in stringency, 8070, 8071.

Expediency of instituting new degrees.—Has to suggest that the B.A. degree should be re-instituted, in connection with an alteration of the course for the M.A. degree, as follows: A junior and senior class should be formed in each department of the Arts course; what attendance necessary for B.A.; classes for this course described; attendance on senior course to qualify for M.A., it being compulsory that candidate for M.A. passes for B.A.; in going on from B.A. to M.A., the candidate should be permitted to choose between (a) Classics, (b) Philosophy, (c) Science, and (d) History, with English Literature and Modern Languages, each leading up equally and alternatively to M.A. degree; attendance for one year in either to qualify for degree at the end of that year, 8075-8088.

Extra-mural teaching.—Thinks that, under certain restrictions as to the number engaged in teaching, extra-mural teaching would give new life and impetus to the work of the Scotch Universities, 8094-8097.



Creation of new professorships.—Thinks there might be a chair in each of the Universities of Comparative Religion and Theology, 8103-8105; this could not at present form part of curriculum for any of the Churches, but many Theological students might attend the lectures, 8106, 8107; it would be very expedient to have a separate chair for New Testament Criticism and Old Testament Criticism, 8108.

Accommodation for principals and professors.—Thinks all professors should have official residences; the principal of the United College of St. Andrews should have one, 8109; as to double principalship, there might be one principal for University, and under him a rector, master, provost, or head to each College, 8110-8113.

LAURIE, PROFESSOR.—Is Professor of the Theory, History, and Practice of Education in the University of Edinburgh; the chair was quite recently instituted, and witness is the first professor, 3922-3924.

Has taken great interest in the subject of education, specially in relation to the teaching profession, for twenty-two years, 3925, 3926.

Course of study and regulations for graduation in Faculty of Arts.—Would be desirable to have an alteration both at the beginning and the end of the course in the Faculty of Arts; thinks an entrance examination might be fairly established for those who intend to graduate; for this purpose, has to propose that the present three years' curriculum examination should be made a first examination for a degree in Arts; that all who could not pass, under age of sixteen, should be remitted to their studies until they were able to pass their first examination for a degree—those above sixteen who failed, should be remitted to the assistant professors in the Faculty of Arts, 3927-3929, 3934-3936, 3941; such attendance not to be counted in *anni academici*, 3962-3965; would equally admit those who do not subject themselves to that examination, but only as 'auditors,' 3928; under this category, boys under sixteen might attend junior classes, but would not be recognised as intending graduates, 3935; would rather not do this, because witness believes that,

on the whole, Scotland is able to do the work wanted for these boys outside the University, by schools and otherwise, 3942-3945; 'auditors' would not be examined or do exercises, and would not burden professor with teaching them, 3928, 3966, 3967; contemplates three examinations for Arts degree, 3946; a young man who has passed his first might go up for his second examination twelve months afterwards, and take what might be called a minor or bachelor's degree, on same subjects as those studied during the first year; witness is not quite prepared to define what subjects should be, but believes Greek would require to be made optional with French or German, 3947-3949; discussion as to proper subjects for such examinations, 3950-3955; the third or final examination for the degree should have optional subjects carried further, 3956-3961.

New professorships and lecture-ships.—If men going up for M.A. are to go out on departmental subjects, there ought to be another Philosophy chair, that of the History of Philosophy merely; there ought also to be another chair of General History, a subject insufficiently recognised in the training of all Scottish Universities; there ought to be likewise a Celtic chair, not merely a Gaelic chair; is further of opinion that the Hebrew chair should be a chair of the Semitic Languages, with an instruction to the professor that he must teach Hebrew specially to Divinity students, 3969; for French and German, University tutors, appointed from time to time by the University Court, would be sufficient, 3970, 3971.

University sessions in Faculty of Arts.—Would not lengthen them, except by assistant professors opening summer classes for those who desired to keep up their studies, 3972.

Extra-mural teaching.—Has doubts of its necessity, 3973; no need for it on ground of stimulating professors, 3974-3978; in case of an incapable professor, there should be power given somebody to remove him, 3979-3982; cases of age or infirmity might be met by more liberal encouragements to retirement, or power might be given to University Court to recognise some special

teacher in such circumstances, 3983, 3984.

Bursaries or fellowships.—Of opinion that all fellows should be lecturers, and would not have any instituted of the value of £100 a year without such a condition, 3985, 3993-4001. Bursaries.—Is acquainted with the bursary system in Aberdeen, but, as regards Edinburgh and Glasgow, it would be worth while to organize the system of presentation bursaries on the footing that patrons should consent to send candidates on condition that they should pass the University examination; the first examination for a degree should be the bursary examination; objects to a centralized system of competition for bursaries, 3985-3991; with regard to bursaries, witness holds that they should not be below a certain amount; thinks the minimum should certainly be £25; present small bursaries, in the personal knowledge of the witness, have caused many holders of them to perish or become permanently injured, from having only defective nutrition while they studied hard, 4001-4007.

University buildings, libraries, etc.—Has to suggest that library fund might be considerably assisted by imposing a charge of 10s. 6d., along with the matriculation fee, for use of library; this would yield about £1000 a year in Edinburgh, and about £800 in Glasgow, 4008; statement of witness' views on the importance of connecting the Universities more closely with the teaching profession, and opinion that Government should give a preference to candidates for schools passing a University examination or holding a degree, 4008-4019.

Functions of General Council.—Of opinion that instead of having more power it should have less, 4020-4027.

LEE, REV. PROFESSOR.—Is Professor of Ecclesiastical History in the University of Glasgow, and was appointed in October 1874, 7582, 7583.

Functions of General Council.—Has only to suggest that in any alteration which may be made in the functions of the Council, care must be taken not to trench on the authority of the Senatus; would not object to Council having one

additional member in the University Court, 7584, 7589; to transfer election of Rector from students to General Council would be very unpopular, 7590, 7592.

New professorships and lectureships.—Is of opinion that in Glasgow University, as well as other Universities of Scotland, the Faculty of Divinity is, as regards the number of its teachers, inadequately provided, 7594; subject further discussed, 7595-7598.

Length of University sessions.—Thinks that if session were to begin at beginning of October and go on to end of April, with a month's interval at Christmas, it would tend very much to the advantage of both professors and students, 7599, 7600.

Emoluments of professors.—Statement regarding the present incomes of the Theological professors in the Scottish Universities, calling attention of the Commission to their inadequacy, and comparing them with the much higher remuneration which has been fixed by the United Presbyterian Church in their recently organized Theological School, 7601-7604.

Extra-mural teaching.—Witness would prefer that every kind of teaching should be carried on under the management of the Court within the walls of the University; with regard to free teaching in Theology, would not approve of any scheme by which Socinianism or Atheism might be taught under the authority of the University, 7605.

LISTER, PROFESSOR.—Is Professor of Clinical Surgery in the University of Edinburgh, and has held that chair since 1869, 1793, 1795.

Course of study and regulations for graduation in Medicine.—Witness has bestowed a good deal of attention upon these subjects, and thinks there are various points on which the existing system is susceptible of improvement; with reference to matriculation, there is a certain *sponsio* or declaration that has to be signed by every matriculating student; this *sponsio* is written in Latin, very few students either understand or read it, and it seems to witness an objectionable thing to ask men to sign a solemn declaration which they don't understand, and that it would be better to abolish it alto-

gether, 1796-1801; is inclined to think that it would be best that the preliminary education for the degrees of M.B. and M.D. should be the same for the two degrees, 1802; at present, any man wishing to take the degree of M.D. must pass an examination in three subjects not required for the degree of M.B., 1803; objection to this arrangement, 1804; would propose that these preliminary subjects for M.D. should be added to those now required for the M.B., and so have only one preliminary examination, and that preliminary to the taking of the Bachelor's degree, and before entering upon course of study, 1805-1818; for degree of M.D., it is desirable that the professional requirements should be greater; at present, a lapse of two years and the production of a thesis is practically all that is required; would add to that a Clinical examination—that is to say, an examination at the bedside, 1819; degrees of Bachelor of Medicine and Master of Surgery are generally taken together at one combined examination, 1820-1822; has to propose that there should be two degrees in Surgery, as there are in Medicine, and that there should be a degree of Bachelor of Surgery to correspond with the M.B., and the Mastership of Surgery to correspond with the M.D., as there is in the London University; these two degrees in Surgery should be distinguished by Ch.B. and C.M., the latter degree to be two years after the former; among other advantages this change and lapse of time would possess, would be the opportunity to the students of increased practice in operations upon the dead body, where there is plenty of material, as in Paris or Glasgow; the scanty supply of bodies for such a purpose in Edinburgh is a very serious evil, 1823-1831; would propose that an experimental course of Natural Philosophy, to be made compulsory in the first year, should be added to the curriculum, involving only the elements of Mathematics, such as the first book of Euclid and Simple Equations; fundamental importance of knowledge of Natural Philosophy to every medical man commented upon, 1830-1833, 1840; thinks a syllabus, approved by the Medical Faculty, ought to be issued on the more purely scientific matters, such as Botany, Natural Philosophy,

and Chemistry, 1834; thus the student, while attending the usual lectures, would restrict his readings to matters in the syllabus, 1842-1847; Pharmacology might also come within the syllabus, 1835; and ought to be more restricted, and more distinct from Therapeutics, 1836-1839; thinks that, in view of the increasing scarcity of bodies, and that the Medical student begins absolutely to learn dissection on these, a course of practical instruction in the rough work of dissection upon rabbits and creatures of that kind, and a sort of Natural History laboratory, judiciously conducted, would be very valuable, 1848-1852; of opinion that Practical Anatomy should be required for two winter sessions, instead of six months, as it is now, 1853; Practical Physiology ought to be included in the curriculum, 1854; suggestion as to certificates of attendance under section 5 of Ordinance 5 required before examination for the degree; thinks this present system vicious as regards Medical students, and that there should be inserted, after subsection 1 of section 5 of the 5th Ordinance, 'A certificate that the candidate has been duly enrolled in a class to which a course of lectures was delivered, shall be held to be sufficient evidence that he has studied in that class,' 1855-1858; grounds for this conclusion, 1859-1862; believes that an alteration in the arrangements regarding the periods of examination is one of the most important matters to which the Commission can possibly direct its attention as regards the Medical Faculty, and witness' reasons for this opinion; scheme drawn up by witness, after having consulted with some of his colleagues in Edinburgh, and also with Professor Allen Thomson of Glasgow, read, 1863; witness, in last part of these observations, intends to give a student an opportunity of offering himself for examination in any one subject at any time that he thought fit, except under the restrictions suggested, the time being limited to once a year, when examinations are being conducted, 1864-1868; when a student comes up to be examined in a number of subjects, and is competent only in some, he should be held to have passed in these; and for those in which he has failed could come up again next year, or when he chooses, 1869-1871;

discussion on proposals read by witness, 1872-1881, 1883-1885; witness contemplates extending the alterations spoken of to all the Medical subjects in which the students are examined, but has not gone into the question as regards other subjects, and expresses his belief that the change advocated would be of extreme value, not only to Edinburgh, but to Medical education throughout the country, 1882.

Creation of new professorships.—Is of opinion that there should be a separate chair instituted for the teaching of Clinical Medicine, with both a winter and a summer course, just as Clinical Surgery is, 1886, 1888, 1889; the provision that now exists permits certain Medical professors, if they claim the right, to teach Clinical Medicine in addition to their own subject; objections to this system, 1887; the Clinical chair is one which ought to be occupied by a man who has had large experience, 1889; and it is most desirable that the professor should also practise medicine, 1890.

LISTON, PROFESSOR.—Is Professor of Hebrew and Oriental Languages in the University of Edinburgh, and has been so for twenty-nine years, 11,234-11,236.

The aggregate number of students in both of witness' classes, the senior and junior, is thirty-eight, 11,237, 11,238; emoluments of chair are, endowment £300, and fees, over an average of five years, £71; has to propose that present fee for both classes of two guineas should be raised to three guineas, as in Glasgow, and that the increase should also extend to all the Divinity chairs, 11,239-11,252; in this latter view, witness' colleagues, Dr. Flint, Dr. Charteris, and Dr. Taylor, agree, 11,253, 11,262; would be very agreeable if the salaries of the professors in the Faculty of Divinity were raised; thinks it essential in order to secure the proper kind of men for these chairs, 11,254, 11,255; has taught in the College in another class, besides Hebrew.—Arabic, Persian, Hindustani, and Sanskrit, to pupils matriculated and not matriculated, more like private tuition than regular University tuition, 11,258-11,260.

PROFESSOR LORIMER.—Is Professor of Public Law in the University of

Edinburgh, and has been so since 1862, 10,561, 10,562.

Regulations for graduation and course of study, in Law Faculty.—Has no remarks to make on course of study, unless witness' suggestions for widening the scope of the Faculty were adopted, 10,563, 10,564; reasons for such extension; the degree of LL.B. was instituted by the former University Commission in July 1863; since then, out of 4670 Law students, only 26 persons have graduated, 10,565; reasons assigned by witness for small number who have taken degree; it is not attractive enough as a distinctive honour, 10,566-10,573; remedy, in order to make degree more attractive, would be, as in the German Universities, to teach Social, Political, and Economical Sciences in conjunction with the Faculty of Law; the Faculty of Law there embraces not only those who are to practise the law, but also the wide circle of those who are to go into diplomacy, those who go into all the public offices of the Government, those who are to hold all local civil appointments, and in short embraces every person employed by the State in any public duty whatever, 10,574, 10,575; witness hands in a number of letters answering questions on the subject received from friends connected with foreign Universities, colleagues in the Institute of International Law, 10,576; the German course extends over three years; description of curriculum as applied to Law students only, and separately to political side of study, 10,577-10,588; has to submit for consideration of the Commissioners, whether we could not now make the degree of Law more attractive by being made more elastic, and introduce a new element into the higher education of this country, by bifurcating the degree—retaining it as it is for legal practitioners, but extending it for others who do not intend to follow the legal profession; in which case the examination and the course of study would require to be adjusted by the Senatus to suit the character of the degree which the man wished to take, 10,589-10,591; witness' present suggestion was, shortly after his appointment, submitted, in a memorial drawn up by the late Professor Aytoun and himself, to the consideration of the Foreign Office, with a

view to obtaining their recognition of such a degree in lieu of an examination for diplomacy, but nothing came of it, 10,592-10,595; no new chairs would be required to carry out suggestion, 10,596; would give as alternative departments, Political Economy for Conveyancing, also the option of a good many of the Physical Science classes, 10,597-10,607; a man undergoing such education would not, in the civil service, so far as the Science part goes, be as well designated by being called Sc.B., or Sc.D., as by being called Doctor of Laws, law having to do with Government in an exceptional manner, 10,608, 10,609; the present course of study for legal purposes seems to witness to be very well arranged, except that it should be a Doctor's instead of a Bachelor's degree, which would make it more attractive, 10,589.

Extra - mural teaching. — Would throw the Faculty of Law, and, as far as witness knows the other Faculties, all of them even more widely open to extra-mural teaching than the Faculty of Medicine is at present, always assuming that the salaries of the professors were increased, or that they were made less dependent upon fees; without the latter arrangement, open extra-mural teaching could not exist, 10,610-10,618, 10,620.

Endowment of chairs. — The limited nature of the endowments, in opinion of witness, tends to lower the class of men who compete for the chairs; in Germany the very highest men in the law go in for chairs, but that will never be so here, unless the endowments are more liberal, 10,618-10,621.

University library. — Witness has been a member of the Library Committee ever since his appointment, and it has always struck him that the sub-librarians are miserably paid; there are two who get £100 each, a fourth librarian who is paid £80, a fifth £70, and a sixth £25; the chief librarian's salary is £325, and is perhaps not so much underpaid as the others, still witness does think even this sum very inadequate for a man in such a position, 10,622-10,625.

MACDONALD, JAMES, LL.D., Ayr. — Is Rector of the Ayr Academy, and has been so for fourteen years; the academy is a high class school in Schedule C

of the Education Act, 5421, 5425, 5426; is a graduate of Aberdeen University, and took degree of M.A. on leaving there in 1849; also got LL.D. as an honorary degree, 5422, 5423.

Course of study and regulations for graduation in Arts. — Thinks that the connection between the studies in the more advanced classes in our higher schools, especially as regards English and Modern Languages, and those in the University curriculum for the degree of M.A. is not close enough, 5427-5433; to establish that connection, would like to see in our higher schools something like the German *Lehrplan* — the work laid down by a proper authority; the subjects would include, besides Classics and Mathematics as at present, English up to a well-defined stage, and Modern Languages, which should be recognised in the examination for the degree of Arts, 5434-5438; proportion of scholars and their ages who go up from Ayr Academy to the University, distinguishing those from senior and junior classes, 5439-5465.

Entrance examinations in Faculty of Arts. — Is in favour of entrance examinations in the Faculty of Arts in the Universities, such an examination as exists for the three years' course; anything lower would fail to have the effect that ought to be produced; is further of opinion that at the secondary schools boys should be advanced as far as those who are able to take a three years' instead of a four years' course in the Faculty of Arts, 5466-5469; admits difficulty in making such an examination exclusive, 5470-5472; would give a little time for the schools and the community to be prepared, and is of opinion that the schools and the public would see to it that the students would be thoroughly prepared, 5473, 5476; conviction of witness is, that the junior University classes in Latin, Greek, and Mathematics are doing the work which ought to be done by the schools, 5474, 5475; would be satisfied, as an alternative, for a time at least, to allow these junior classes to go on as at present, and have an examination at the door of the second class, 5476, 5477; this opinion further discussed, 5478-5486; suggestion that the examining board for entrance

examination to second class should be composed partly of Scotch University professors, and partly of distinguished graduates and teachers, 5508-5510; a change in curriculum of study for M.A. degree might be made by making certain subjects alternative; Natural Science might come in in place of Greek, 5487-5492.

New degrees in Arts.—Would like to see, if not a degree, some certificate or diploma for the teaching profession; there being now in two Universities chairs for the Theory and Practice of Education, would think that teachers, especially those in the higher schools, ought to be understood to take advantage of that, 5493, 5494, 5496-5499; provision for securing high qualifications in teachers of the higher schools in Germany described, 5495; qualifications which witnesses would propose should be required to obtain teacher's certificate or degree, 5500-5507.

Extra-mural teaching in Faculty of Arts.—Thinks it desirable, provided that adequate provision were first made for the ordinary professors, that extra-mural teaching should be introduced into Faculty of Arts, 5511; alternatively, intra-mural teaching in the University by distinguished graduates might result in much good, 5512; discussion of the latter proposal, 5513-5528.

Bursaries.—Has only to suggest that, so far as practicable, as many as possible should be thrown open to competition; from witness' acquaintance with working of bursary system in Aberdeen, knows that the standard in mental calibre of the competition students is higher than that of presentation bursars; would not, however, interfere with county bursaries for encouraging schools in the founder's native county, or those of county associations, 5529-5545.

MACKNIGHT, JAMES, W.S.—Is a Writer to the Signet in Edinburgh, a member of the Town Council of the city, and has been assessor for the Town Council in the University Court since 1863, 4816-4818.

Constitution of University Court.—Considers the constitution of the Court a good one, but thinks it might be advantageous if there were some more completely defined power of originating measures and express-

ing an opinion, without simply reviewing the opinions of others, 4819-4824; from discussions which have taken place in the Court, there seems to be some difficulty to know what falls under the category of 'improvements' in the 2d sub-section of section 12 of the Act of 1858; and also whether the Court should act under that part of section 12, or under the 19th section of the Statute, 4825-4841; would have no objection to add one more member from the General Council, and another from the Senatus, to the University Court, 4842, 4843, 4858-4860; would also recommend a diminution of the present quorum of five to three, and reasons for this proposal, 4844-4867; has no further suggestions to make as to constitution of University Court, and thinks very few Acts so novel in their character have worked so well as the Scottish Universities Act of 1858, 4861; the Edinburgh University Court have never had occasion to act under the 5th sub-section of section 12, to suspend or censure a professor, 4862-4865.

Functions of General Council.—No alteration of functions of Council required in any way, 4866-4868; meetings of the University Court are irregular, sometimes twice or three times a month, and then an interval of some time may elapse; meetings are summoned by circulars by the secretary, on the motion of Principal Sir Alexander Grant, in the absence of the Rector, 4873-4879; has never been a member of the body of Curators who administer a portion of the patronage of the University, but thinks their action as a body has been judicious, 4869-4872, 4880-4883; would, however, have no objection to the proposal that when a vacancy in a professorship is to be filled up by the Curators, they should have added to their number the Dean of the Faculty in which the chair is placed, 4884.

MACLAGAN, PROFESSOR, Edinburgh.—Is Professor of Medical Jurisprudence and Police in the University of Edinburgh; was appointed in 1862; and is also one of the Professors of Clinical Medicine, 7386, 7387.

Course of study and regulations in the Faculties.—In reference to the Faculty of Medicine, agrees with

a strong recommendation made by the Medical Faculty a year or two ago, that the students should begin their study in summer, and so have a period of four years and a half for their studies, 7388; is anxious also that men should be allowed to come up for examination as soon as they have finished their course of study in any subject, 7389; importance of this further urged, and average age of students when they begin the study of Medicine, 7390; important that a six months' course should embrace only one lecture a day, and not that it should be got through in three months by giving two lectures a day, 7390, 7391; thinks that it would be well to raise the fee for degree of M.B. from present price of twenty guineas to twenty-five guineas; is further of opinion that the price of the diploma for the Faculty of Arts in Edinburgh is too low, and should be raised from three guineas to five guineas, 7392-7394.

New Faculties or degrees.—Would like to see degree of Master in Surgery improved a little, and extended beyond the M.B.; would be better if degree of C.M. were made more real, by men who take it having a little extra examination in Surgical Anatomy and in Surgery, both systematic and clinical, 7395, 7396; considers the preliminary examinations for Medical degrees at the present moment most unsatisfactory in regard to Latin, 7397-7402.

Creation of new professorships or lectureships.—Thinks it would be important to have chairs of Mental Diseases and of Ophthalmology; would also like to see one or more chairs of Modern Languages, with tutors to teach the rudiments of these languages, it being of the last importance that medical men should know at least French and German, 7403; considers a knowledge of Greek is required for the Doctor's degree, 7404; as to whether a chair of Clinical Medicine would be desirable, witness is personally interested, being one of the Professors of Clinical Medicine, and who, if a separate chair were created, would cease to be so; but witness thinks there would be advantages in having a separate professor to teach nothing else; difficulty of doing so without injury to other chairs con-

sidered; thinks also that the present professors get on very well; further, that Professor of the Practice of Medicine should have wards in the hospital to illustrate his systematic lectures, 7405-7408.

Provision of assistance and apparatus.—Is of opinion that the provision for assistance in the Medical departments is inadequate; first, with regard to 'assistants,' would like that they might receive the style and title of 'University Tutors;' witness' present assistant is a Fellow of the College of Physicians, and gives tutorial instruction to the class; he does an immense quantity of work, and has only £50 a year for it; another important matter is an endowment for the Clinical tutorial class; has to state that this is a newly instituted thing, and has been a very successful proceeding; its object is to supply preliminary instruction to the young men attending the class of Clinical Medicine, in the rudiments; such, for example, as how to use the stethoscope, how to percuss a patient, and to distinguish between one morbid sound and another; for the present tutor, Mr. Murdoch Brown, a provisional grant of £50 was with difficulty obtained from the University; and the Faculty, through the Senatus and University Court, obtained leave to charge a fee of one guinea for attendance, and there is now a class of eighty being drilled; method of teaching explained, 7409-7412.

Length of University sessions.—Would prefer, with respect to Faculty of Medicine, that there were two semesters of four months, one in winter and one in summer, an eight months' course altogether, 7413-7415.

Extra-mural teaching.—Witness has only to remark that he would like the fees to be secured in some way in other places as they are in Edinburgh, where by Ordinance each student must pay to the extra-academical teacher the same fees that he would pay to the professor, 7416.

Election of University officers.—Would like to see a representative of the Senatus, and perhaps one from the General Council, in the Board of Curators, 7417-7420.

Emoluments and retiring allow-

ances of professors.—On this subject witness has to submit that certainly some remuneration is required for examinations; witness has for some years been doing the work of examining clinically; also examines for degrees in Science and for degrees in Law; last year witness and his colleagues examined clinically eighty-four students. This is very heavy work, and there is no remuneration to us as examiners; the £100 of endowment which witness receives is understood to be equivalent to a fee for examination *quâ* Professor of Medical Jurisprudence, but there is no remuneration for the other examinations, 7421-7423; method and nature of examinations, 7424.

Bursaries.—Those giving a preference to names should be discouraged; does not so much object to bursaries attached to counties or districts, but would like to see an examination for all, 7425.

University buildings.—Witness would like much to give some extra lectures on Public Health in winter, summer course of three months being too short, but cannot do so for want of class-room accommodation, 7427-7429.

**MACLEOD, PROFESSOR.**—Is Professor of Surgery in Glasgow University, and was appointed in 1869, 6866, 6867.

There is no other Professor of Surgery in the University, 6868; there is a Professor of Clinical Surgery, the chair was instituted in 1874 by the University Court; it is a permanent endowment; the endowment was provided by the friends of the gentleman who was appointed, 6869-6873; witness teaches the whole subject of Surgery, practically as well as theoretically, 6874, 6875; teaches in the hospital clinically; but that is separate altogether from the University teaching, there being no necessary connection between the University and the hospital, 6876; it is a necessary part of the curriculum that students attend Clinical Surgery, 6877; amount of endowment of witness' chair, and average produce of fees; believes this year's class will be the largest which has ever attended Surgery in the University, 6878, 6879; has also a summer operative class, for which a separate fee is charged; amount of emoluments derived from that source,

6880-6883; considers emoluments of chair sufficient, with this exception, that the expenses of the working of the class are very considerable, and these are borne by witness entirely; the only allowance is one of £15 a year for cleaning the room; has no allowance for assistant or anything else, 6884-6886; is chiefly desirous to have an assistant, a graduate who is in practice, who could assist during the day and correct examination papers of an evening; could get such an assistant for £50 or £80; has also to mention the necessity for a porter, to obtain dead bodies and look after them; pays a person at present 10s. a week out of his own pocket; a trained man is required for this work; the one now employed also serves Dr. Thomson in the Anatomy class, and Dr. Young in the museum; witness would, however, require a person entirely for his own use, 6894-6906; there is a special museum attached to class, which is witness' own property, 6887-6889; no change required in regard to teaching of Surgery generally; best evidence of that is the increase which has taken place in the class, 6890; average number of students over three years, 6891-6893.

Subjects for dissection.—Have a very large supply, larger than any school in Britain which witness knows; many hundreds are buried in Glasgow which might also be procured, 6907; would be in favour of raising the fees, if the advance took place all over the Medical schools, 6908-6912; thinks that summer class for teaching Operative Surgery should form part of the curriculum, and has always been astonished it has not been made compulsory, 6913, 6920-6924; reasons for that opinion, 6914-6916; means taken by witness for teaching Operative Surgery in summer class; teaches it entirely on the dead subject, performing every operation before the students, and afterwards making them perform it themselves on the dead subject, 6917, 6918; advantages of this system, 6926; of opinion that teaching of Clinical Surgery in the hospital does not practically teach Operative Surgery, 6925; has no other change to suggest as to Medical curriculum, 6927, 6928; has to add that the mode of



teaching Systematic Surgery from dissections has greatly increased within the last twenty years, and accordingly increased the work of the teacher, 6929.

*Re-examined.*—Is desirous of supplementing former evidence on the subject of Clinical teaching in University of Glasgow; history of method of Clinical teaching in Glasgow up to 1874, 11,467-11,469; change which took place on opening of the Western Infirmary, and creation of chairs of Clinical Surgery and Clinical Medicine, 11,470-11,478; claim of latter professors that their Clinical teaching should alone be recognised, 11,479, 11,482-11,487; witness, with Dr. Gairdner, the Professor of the Practice of Medicine, claims the right to have their Clinical teaching recognised by the University, as heretofore, 11,483-11,485; further, desires that the Clinical teaching should remain as it is now, perfectly open and free, and that every teacher shall be put upon an equal footing, so that students shall be free to choose him from whom they think they will get the most good, 11,486; desirous that the University authorities should not comply with the demand of the Clinical professors, 11,487-11,490; is not aware that the subject has ever been discussed by the Senatus, 11,496-11,498; witness is strongly of opinion that it is his duty, as Professor of Surgery, to teach it practically as well as systematically, and the proposal of the Professor of Clinical Surgery would result in preventing witness from practical teaching, 11,491-11,495; method followed in King's College, London; 11,498-11,501; and in Edinburgh, 11,503; opinion of Medical Faculty on subject of dispute, in their minute of 7th April 1874, read, 11,504.

**MACPHAIL, DONALD, M.B., C.M.**—Is a Vice-President of the Glasgow University Medico-Chirurgical Society, 11,741; became a graduate in Medicine in May 1877, taking the degrees of M.B. and C.M., after a five years' curriculum in Glasgow, 11,742-11,745.

Curriculum of Medical study.—Of opinion that, considering number of subjects, the curriculum is too short, and that in the later years the classes are too crowded; would prefer

to lengthen it by adding to the beginning, so as to give more time to the scientific classes; would also introduce, as a new subject, Experimental Physics, and would have scientific subjects exhausted before a man began the professional ones, 11,746-11,753; witness' scheme for carrying out his idea; would make the full curriculum one of five years; description of sequence of classes in the various years, 11,754.

New professorships and lectureships.—With a view to this scheme, would like to see a chair of Pathology instituted; at present the classes are extra-mural; then there should be lectureships on State Medicine, and Mental Diseases, these not to be compulsory, 11,755-11,759; the chair called *Materia Medica* ought to be chiefly a chair of Therapeutics, and the latter subject should have at least fifty lectures of the course, 11,760-11,763; then of lectures on Midwifery, at least fifty should be devoted to Diseases of Women and Children, 11,764, 11,765.

New degrees.—It would be well to have some such degree as B.Sc., the holder of which would be exempt from the preliminary and the first professional examinations, and from the first winter; his curriculum would be a four years' one; subjects for such a degree, 11,766-11,768; suggestion that for Chemistry, Botany, and Zoology, students should be allowed to study these extra-murally, and come up for an examination, thus shortening their course to four years, 11,769-11,773; opinions expressed by witness may be taken as the sentiments of the Medico-Chirurgical Society, and of the students, 11,774-11,777; of opinion that there should be tutorial scholarships, of the nature of assistant professorships, open to competition, and further details of scheme proposed, 11,779-11,797.

**MACPHERSON, PROFESSOR.**—Is Professor of the Law of Scotland in the University of Edinburgh, and has been so since 1865; is also Dean of the Faculty of Law, 3032-3034; has never been a member of the University Court, but is a member of the Senate, 3035, 3036.

Constitution and powers of the University Court.—Is well contented with the working of the Court as it is; as an improvement, it might

be a condition that the assessors should all be members of some Scotch University, or graduates of some English or Irish University; and with reference to the Town Council, would only except the Lord Provost, who should be *ex officio* a member, 3037, 3038; would not object to an additional representation of General Council in Court, provided that in doing so the minority obtained a representative, 3042-3045; thinks that the University Court should not have power to reject resolutions of the *Senatus* where they have not been appealed against,—that is, under section 12, sub-section 1, 3046-3052.

Functions of General Council.—Does not think the Council can have any executive functions with advantage, and they should not have any veto on measures passed by the University Court, 3053-3057; there are now three degrees in Faculty of Law,—the Doctor of Laws, the honorary degree, being of a very general description; the degree of Bachelor of Laws, which requires attainment of a higher standard than in the case of any other degree in the University; and a recently instituted third degree, that of Bachelor of Law, 3058-3062; qualifications and course of instruction for that degree, 3063-3067; no direct professional advantage follows from taking that degree, although, of course, it carries the honour, and the becoming a member of the General Council; the higher degree of Bachelor of Laws is accepted as a pass to the bar, and also by the Court as a pass to admission as a law agent, but being only open to those who possess a degree in Arts, many of the best students are deterred from trying for it, 3068-3071; is of opinion that a degree of B.A., or some modification of the M.A. degree, admitting one or two of the subjects of the Legal Faculty as qualifying for it, would induce men who have taken the Bachelor of Law degree to make an effort to graduate in Arts, and proceed to the higher degree of Bachelor of Laws, 3072-3074; with regard to examination for a degree, it is found very oppressive by students to take six subjects all at once for the higher degrees, or even four for the second one; suggests that class examinations at end of each session might be held to qualify, 3075-3078; there are six professors in Faculty of Law; these,

with two additional examiners, attend the degree examinations, 3079-3086.

Regulations for graduation in Arts.

—Thinks the modification already pointed at would increase the number of graduates in Law, and also the number of Law students who study in Arts; does not approve of proposals of optional subjects in Arts, so far as these render Greek optional, and thinks the rule making Latin essential, gives an undue preference to Latin at the expense of Greek, 3087; would like to say that the Law Faculty would prefer that men of science, and even pure scholars, received some other distinction than the degree of Doctor of Laws, leaving the degree in Law to lawyers, with the addition of historians and men who have rendered eminent services to the State, 3088-3092; as being the highest degree in the Faculty, witness would prefer that graduates could claim the Doctorate, 3093, 3094.

New professorships.—As regards the recently-founded professorship of Commercial and Political Economy and Commercial Law, witness cannot see any appropriateness in the combination of these subjects; a considerable portion of witness' own course is devoted to Commercial Law, and might be made available to those who are being trained for commercial life, by extending, if necessary, present summer course instituted by witness, 3095-3100; thinks that Commercial Law should not find a place in the subjects assigned to the Professor of Commercial and Political Economy, 3101; considers Law Faculty is nearly completely equipped as a school for education of practical lawyers; would, however, like to deal more with the subjects of process and procedure, and if witness had an assistant, material use could be made of him in teaching such matters as these, 3102-3104; History has never had fair play in the Arts; is of opinion that if the subjects for graduation in Arts were a little more elastic, a Professor of History might find an audience there, and give attractive and instructive lectures on History, apart from Constitutional Law; would therefore associate the present chair of Constitutional Law and History in the Faculty, with the Faculty of Arts as well as for the teaching of Civil History, 3105-3113; another chair, which

should be attached to both Faculties, even if Commercial Law were dissociated from it, is the chair of Commercial and Political Economy, 3113.

Entrance examinations. — Would apply an entrance examination to any one enjoying a special bequest or bursary, or to whom any public money is paid; but is very averse to shutting the door of the Universities by any entrance examination beyond that, 3114-3116; objects to limited tenure of office to seven years of the Professor of Political Economy and Commercial Law, 3117-3119.

Extra-mural teaching in Faculties of Arts and Law. — Has no objection to its introduction in Faculty of Arts, provided that the endowments are increased, 3120-3124; would give very much the same answer as to admitting the same principle in the Faculty of Law, 3125; effect in latter case of extra-mural teachers in Law subjects choosing evening or other hours for Law students would seriously reduce the professors' fees, 3126-3138.

Election of University officers. — Thinks present exceptional constitution of Court of Curators (peculiar to Edinburgh) is undesirable; suggestion of different ways by which it might be improved, 3139-3145.

Emoluments of professors. — Thinks that generally they are insufficient; in many cases the incomes of professors are not equal even to the second class of professional incomes; the emoluments require to be raised in all the Faculties, 3146.

Retiring allowances. — Of opinion that, alternatively, thirty years' work, or being sixty-five years of age, would be a proper arrangement for regulating time of retirement, 3147-3151.

Financial position of University. — The income of the General University Fund is insufficient for the burden it has to bear, and it is constantly found that there ought to be much larger grants given to teachers in the Scientific departments; this applies also to allowances to class assistants, 3152, 3153; with reference to management of University, witness has to say that it is undesirable that any professor should be the salaried officer of his brethren, and would prefer such offices were filled by some one who is not a professor; refers to secretary of the

Senatus and the deans of some of the Faculties, 3154-3174.

Scholarships and bursaries. — Would be desirable to have a general Ordinance for guidance of Edinburgh University, such as No. 28 of the Aberdeen Ordinances; in reference to regulation of bursaries, proposal to create a bursary fund to throw all vacant bursaries into; but the whole scheme of bursaries requires to be looked into, and a general scheme devised, 3175-3185.

Fellowships and scholarships. — Proposal to exact duties from holders of fellowships and scholarships considered; witness is favourable to the principle, as likely to raise the standard of teachers in the University, 3186-3192.

MASSON, PROFESSOR. — Is Professor of Rhetoric and English Literature in the University of Edinburgh, and was appointed in 1865, 7265, 7266.

Constitution and powers of University Court. — Thinks there should be two additional members from the Senatus, and of these one should be a member of the Faculty of Arts, and the second might be in rotation between the Faculties of Law and Divinity, 7267-7270, 7272-7275; thinks that the General Council would probably expect in that case an increase, and might be desirable, 7271.

Course of study and regulations for graduation in the Faculty of Arts. — Upon this point witness has sent in certain printed documents, which might form the basis of his evidence; witness has first to refer to a circular which, as convener of a committee of the General Council, he issued about six years ago to the members of the said committee, suggesting a considerable change in the subjects admissible to qualify for M.A. degree; the outlines of the scheme were, that instead of the present three departments, there should be added, (4) Chemistry and Natural Sciences, and (5) Law, History, and Political Economy; it was then proposed that the degree should be attainable by a pass in three out of those five departments, two of such departments necessarily being two out of the old three, or all might be the old three, the object of these options being to suit all different classes of students; the scheme was on the supposition that there should be no B.A.; of opinion that Latin

should be imperative, but would give option for Greek, 7276-7282; the plan makes no provision for Modern Languages, being schemed on the existing apparatus for teaching, but these might be added, 7283; is of opinion that graduation in honours in English Literature ought to be introduced; it does not at present exist; reasons for this opinion, 7284-7286; question discussed whether for graduation for honours there might be honours in that subject alone, or it might be conjoined with some other subject, 7299-7301; has no anxiety to see B.A. instituted; but if instituted, it should correspond with our present M.A., then M.A. should be attained by further study in one of the departments, 7287-7290; would not recommend any other degrees to be instituted, 7291.

Entrance examinations. — Until secondary education is in a different predicament, would prefer an examination before entering the second class from the junior for all students going through the curriculum, to an entrance examination barring entry to the junior classes, 7292; usual age at which students enter witness' class averages about twenty-one or twenty-two; they range from sixteen or seventeen, but very few so low as that, to thirty-two; is under the impression that there are more students of a mature age now than there were in 1865, when witness began, 7296-7299.

New professorships or lectureships. — Would like to see a professorship of the Teutonic Languages and Literatures, and a professorship of the Romance Languages and Literatures, 7302-7305.

Assistance and apparatus. — Thinks that the printing of papers, with perhaps an occasional diagram or map, ought to be counted as 'apparatus' in the Philosophical classes and in witness' own class, as much as material apparatus such as machinery and the like, and that a sum of £25 a year would be a great boon to the professors in the Philosophical department, 7305-7307, 7309; witness has an assistant, who has, in common with those in the classes of Logic and Moral Philosophy, £40 a year; thinks all of these should be raised to £100; duties of such assistants, 7308, 7310-7316.

Length of University sessions. — Thinks the winter session might begin about beginning of October; would not much increase the Christmas holidays; is not in favour of a separate summer session in the Faculty of Arts, 7319-7322.

Extra-mural teaching in Faculty of Arts. — Would be desirable to have a greater variety of teachers; but thinks the best way would be to have an increase of tutorships within the University; sees great difficulty in introducing extra-mural teaching into the Arts Faculty in the same manner as is done in the Medical Faculty, 7323-7326.

Election of University officers. — Thinks the system of curatorship is a good one; also, that it would be better not to have the dean of a Faculty, or any member of the Senate, connected with the appointment of a professor, 7327-7331.

Emoluments of professors and lecturers. — If assistants were employed in the shape of lecturers, their emoluments would have to be increased; also thinks that if extra-mural teaching were allowed, an increase of the emoluments of the professor should take place; even the option proposed in the curriculum would involve a similar consideration, 7332, 7333; would not increase the fees, and would much prefer to increase the endowments, keeping fees low, 7334, 7335.

Retiring allowances of professors. — Thinks that a professor ought to be able to retire after a certain amount of service and a certain age, — say twenty-five years' service, and the age about sixty-five or seventy, 7336-7339.

Mode of appointment to bursaries and fellowships. — On that subject witness would refer to a paper which he drafted, and which was circulated by the Senatus among all patrons of bursaries in connection with the Faculty of Arts all over the country, — to county associations, to the Town Council, and to private patrons, — inviting them to throw their bursaries together, with a view to an annual examination for them in the University; the appeal met with very little success; the Town Council preferred to go on with their own examinations; those bursaries in the hands of the University are made competitive,

7340-7350; hands in documents with respect to graduation in Arts and bursaries, 7351.

**MEIKLEJOHN, PROFESSOR.**—Has been lately appointed to a chair in the University of St. Andrews, called by the name of the Theory, History, and Practice of Education, recently founded by Dr. Bell's trustees, 11,173-11,175.

**Institution of new degrees.**—Proposes to institute a new degree of B.A. for the benefit of teachers alone, and is inclined to recommend that they might be allowed to graduate as B.A. after an attendance of two, or at most three, sessions, 11,176, 11,177; reasons for preferring a degree to a certificate, 11,178-11,180; sees no objection to instituting a degree for teachers only, 11,181-11,185.

**Creation of new lectureships.**—Thinks that lectureships in aid of the objects of witness' chair, on the methods of teaching certain subjects, —short courses of lectures, —might be attached to such chairs as Greek, Latin, Mathematics, Natural History, and English Language, each professor giving a series of, say, twelve lectures as to the best means of teaching his subject; to be paid at the rate of five or six guineas each lecture, 11,186-11,195.

**Apparatus or accessories to chair of Education.**—Witness would like to form a museum of all the best apparatus to be picked up in Germany, France, Holland, and England, such as models of sections of the earth, raised and other maps, apparatus for teaching arithmetic, also a complete collection of English and foreign school-books, 11,196-11,199; use of such a library discussed, 11,213, 11,214; witness lectures on his subject in St. Andrews to a class of ten students, and in Dundee to a class of eighty-seven, composed of men and women mostly engaged in teaching; these sit in one room in the Dundee High School, 11,200-11,206.

**Bursaries.**—St. Andrews very ill off for bursaries; a sum of £1000, divided into ten bursaries of £50 each, and twenty of £25, open to all Scotland, would do a great deal of good to the University, 11,207-11,212, 11,222, 11,223, 11,227-11,229.

**Fellowships.**—Need of a travelling fellowship, of say £100, to be confined to teachers, and applied to six months' travel among schools on the Continent, 11,214-11,219.

**Financial position of St. Andrews University.**—Has only to remark that it is miserably poor, and that during the last ten years there has been a falling off in number of students; with only about 150 students, there is teaching power for 300 or 400 students, 11,221, 11,224-11,226; of opinion that the teaching of both Ancient and Modern Languages in our Universities could be much improved, and the time shortened; would prefer, however, to be allowed by the Commission to write out a memorandum on the subject, 11,230-11,233.

**MILLIGAN, REV. PROFESSOR, D.D.**—Is Professor of Divinity and Biblical Criticism in Aberdeen University, and has been so since 1860; witness was educated in his Arts course, and part of Divinity course, at St. Andrews, and in the remaining part of Divinity course in Edinburgh, 10,370-10,372; holds degree of D.D. from St. Andrews, 10,373.

**Institution of new degrees in Arts.**—With regard to re-institution of B.A. degree, is afraid that the effect of this would be to bring the higher degree down to its level, 10,375.

**Course of study and regulations for graduation in Arts and Divinity.**—Does not believe in options for subjects of Greek and Mathematics, and does not believe in the substitution either of Modern Languages or Physical Science, and has practically come to the conclusion that he would leave graduation for M.A. degree very much as it is, 10,376-10,392.

**Graduation in Divinity.**—Is doubtful whether the B.D. degree, which has been introduced into each of our Universities, is worthy of being continued; the standard is too low, and it will be extremely difficult to heighten it, 10,393; of opinion that a common board of examination for the four Universities might tend to raise the standard, 10,394-10,406; degree of D.D. is entirely honorary, and witness does not think it should be otherwise, 10,407, 10,408.

**Entrance examinations.**—Thinks that a real entrance examination would

so completely change the character of our whole University system, that witness' conclusion is against it, 10,410, 10,416-10,418; present bursary competition in Aberdeen differs from entrance examination in this, that it excludes nobody from the University, 10,411-10,413; thinks many of the difficulties with regard to entrance examinations would be obviated by having an examination barring entry into the senior classes at end of first year, 10,419-10,424; would put such an examination in the hands of professors, with assistants or extra-examiners, 10,425-10,427; is adverse to abolition of the junior University classes, 10,428-10,430.

Creation of new lectureships.—Has only thought of this point in relation to the Divinity Faculties; suggestion that to each Divinity Faculty there should be attached lectureships, say two, with an endowment of £100, open to men who, after having obtained a parish, have specially studied some Theological topic; that the University Court or Senatus should invite such men to come to the University towns and deliver a short course of lectures on their special subject; the lectureships to be tenable for four years, 10,431-10,436, 10,475; the Faculty of Divinity in Aberdeen is rather in a languishing condition; number of students and length of course, 10,437-10,442.

Extra-mural teaching in Faculty of Arts.—Might be an advantage, if in a form to reduce the present classes where they are too large, 10,443-10,445.

Patronage of professorships.—Would think it very desirable if some other source of patronage than the Crown existed for the Divinity chairs, 10,446; proposal that the patronage should be in the hands of the four University Courts grouped as a whole, 10,447-10,454, 10,456-10,463; possibility of extending this system to all the Faculties, 10,455.

Constitution of Theological Faculty.—Would not object to see some of the chairs in some degree thrown open,—the chair of Hebrew, for instance, and the chair of Biblical Criticism; would have a test of a very general kind, excluding no one who came forward saying that he accepted the Scriptures as the word of God, and that he would faithfully and reverentially interpret them, 10,464-10,468; proposal further discussed, 10,469-10,472.

Emoluments of professors in Faculty of Divinity.—Thinks it is much to be regretted that in many chairs they are so low as they are; generally, should say that a Divinity professor ought to have at least £600 a year, 10,477-10,481, 10,501, 10,502.

Mode of appointment to bursaries.

—The Drum Divinity bursaries are wholly presentation bursaries; these are very large, amounting to £74 a year; is anxious to suggest whether it might not be possible to purchase that right of presentation by sacrificing a portion of the funds, and then throwing them open for competition, 10,482-10,491; there are a good many other Divinity bursaries, but they are comparatively small, about one-half are open to competition; they number in all nearly one for every student, 10,492-10,500.

M'KENDRICK, PROFESSOR JOHN GRAY, M.D.—Is Professor of the Institutes of Medicine in Glasgow University; was appointed in October 1876, 9599, 9600; was previously engaged in teaching Physiology in Edinburgh, since the summer of 1869, 9601, 9602; is of opinion that for the satisfactory teaching of Physiology a professor should not be in practice, but devote his whole time to the duties of his chair; would make the only exception to this, that he might hold a hospital appointment, and so secure an opportunity of illustrating to his students the views which he taught in his classroom, 9604-9607; has had extended opportunities of seeing the appliances of teaching this branch of Science by visiting many of the Physiological laboratories on the Continent and in this country, 9608; in order to teach Physiology efficiently, a properly equipped laboratory is now an essential, 9608; when witness was appointed to the chair he found very little apparatus, excepting some for chemical purposes, in the laboratory, but witness has since 1869 spent about £1000 on physiological apparatus, which is now in the University of Glasgow, and his own private property; the most of this ought to belong to the University, 9611-9615; the present emoluments of the chair may be taken at a total of £715, out of which witness pays for a laboratory assistant £60, for a teaching assistant £45, and laboratory expenses—use of chemicals,

tear and wear of the instruments, and new instruments—may be taken at £100 a year; this leaves the net income at about £500, 9610; recommends that an annual sum of, say, £160 should be allowed, £100 for laboratory expenses, and £60 for a laboratory assistant, 9616, 9620, 9623; the apparatus would then belong to the University; would further think it fair that the professor should pay one-fourth of the expense of new apparatus, 9617–9619; where laboratories have large collections, partly the property of the professor and partly belonging to the University, catalogues, in duplicate, should be kept, and compared with the articles every six months, 9625; Dr. Henry Muirhead, of Cambuslang, has informed witness and Principal Caird that it is his intention to bestow the munificent endowment of £2000 for a Muirhead Demonstrator of Physiology, in connection with witness' chair; this will provide an efficient assistant, and if the sum of £160 is granted, would leave the endowments of the chair at £750 clear, 9619–9622.

Course of study and regulations for graduation in Medical Faculty.—Has observed, during the time he has been teaching in Edinburgh, the bad effects resulting from the present arrangements in regard to first professional examinations in Botany, Natural History, and Chemistry, these being passed at the end of the second year of study, at the very time the students ought to have their attention fixed upon Physiology and Anatomy in particular; would suggest it should be arranged that this first professional examination should be passed in the month of October, before beginning the second winter session, and so leave the remaining three years free for the more strictly professional studies, 9626–9628; in Glasgow and Aberdeen an even worse arrangement obtains, as students are there examined in Natural History in the third year, 9631–9635; thinks it would be a good arrangement to dissociate the three subjects of Botany, Natural History, and Chemistry from the proper Medical curriculum, and transfer them to the Faculty of Arts, 9629, 9630.

M'LAREN, JOHN, Advocate, Edinburgh.—Is a member of the General Council, and has for some years frequently attended its meetings, 8362–8364.

Constitution and powers of the University Court.—With regard to the constitution, concurs in the general opinion of the members of Council, that they should have additional representation in the University Court; would, however, prefer that the constitution of the Court should be elective; would contemplate having a Court of from twelve to fifteen members, of whom one-third should be elected by the Council, a third by the Senatus, and a third by the Crown; reasons for this opinion, and the constitutions of other Universities in Great Britain referred to, 8365–8375.

Powers of the University Court.—Thinks that it might be practicable, and would be desirable, to transfer the patronage from the present Board of Curators to the University Court, or divide it, if thought proper, leaving a certain number of chairs in the gift of the Town Council, 8376–8378.

Functions of the General Council.—Does not think that the Council is a body fitted for administration, but would be favourable to giving it a larger share in the business of University legislation; would, to insure further deliberation, give the Council power of delaying a proposal of the University Court until the Court assigned reasons for rejecting the proposal of the Council, 8379, 8380; suggests that at one of the half-yearly meetings a report might be presented, either by the Senatus or the University Court, to the Council regarding their transactions for the past year, and the financial condition of the University, 8381; subjects which should be embraced in these reports considered, 8382–8391.

Creation of new professorships and lectureships.—Thinks that the present rule, under which no new professorship can be constituted without an endowment, might be modified with advantage, 8392, 8393; thinks, as a member of the bar, that, without interfering with the functions of the Professor of Law, there is room for a class of competent men, such as could be found in Edinburgh, to give short courses of lectures on subjects which they had specially studied, if they were given the rank of professors and the right to receive fees from their students, without endowments, 8394–8397; reasons for believing the teaching of such specialists would be

valuable, 8398-8402; in the Law Faculty thinks there is room for a most useful new professorship, that of Mercantile Law, giving the subject the range it has in Bell's Commentaries; this would easily fill a session, and give the Professor of Law more time for other branches of his subject, 8403-8412.

Mode of presenting and electing University officers. — Under present system, no one is put on the roll unless he gives in a claim, and he pays a guinea for registration; would prefer that the registrar should put every graduate upon the roll as he is admitted, at a fee of half the present amount, to be paid along with the graduation fees, 8413-8429.

MORRISON, DONALD, M.A., LL.D. — Is Rector of Glasgow Academy; was a student of, and is an LL.D. and an M.A. of, Aberdeen University, and in consequence a member of the General Council, 11,331-11,335.

The average number of boys attending the Glasgow Academy is 600; of these about 200 belong to the preliminary department, the rest pass into the classical department; curriculum of the school described, 11,336-11,338; on an average, from twenty to twenty-five boys leave yearly for the University, of whom one-half go from the third and fourth classes, and are quite unprepared for University work, 11,339-11,342; thinks sixteen is an early enough age to enter the University, 11,343-11,346.

Entrance examinations. — Thinks it would be possible to institute an entrance examination of as high a standard as the 5th class boys of Glasgow Academy could pass, 11,347; admits present deficiency of both primary and secondary schools to bring the students up ready, but adheres to opinion that means would arise to prepare students to pass such an examination, 11,348-11,358; would like to see all the entrance examinations transferred from the Universities to the schools, corresponding to the leaving examinations of the German *gymnasias* and of the English public schools, 11,359; suggestions for the nature of the examining board which should be created for this purpose, 11,360-11,363; for those advanced in years, would allow attendance at the University on Mathematics and Logic,

until they were ready to come up for Classics, 11,364-11,368, 11,374; would strongly object to proposal to have an examination at beginning of second year, leaving junior classes open in Universities for the first year, 11,369-11,373; thinks that both primary and secondary education might be raised by a system of bursaries, to be obtained by increasing the school rates or otherwise, 11,375-11,377.

Study for graduation in Arts. — Would not wish to see any material change introduced, 11,378; would not approve of optional courses in Science for M.A. degree, 11,379, 11,380; eminence in subjects not included in M.A. degree should be met by a Science degree; would allow an option for the latter of a Modern Language in lieu of Greek, but would make Latin imperative, 11,381-11,389.

New degrees. — There might be a degree for a somewhat more limited course than M.A., to meet the case of schoolmasters in the primary schools, and others who cannot spare time for the whole course for M.A., 11,390-11,393; but for teachers in the secondary schools would require the M.A. or highest possible degree, 11,394, 11,395.

Extra-mural teaching in Arts Faculty. — Would not approve of its introduction, as likely to lead to a system of 'cram,' but should like to see teaching power increased intramurally, by assistants to professors, 11,396-11,405.

NICHOL, PROFESSOR. — Is Professor of English Literature in the University of Glasgow; was a student in Glasgow from 1848 to 1855; and, after an interval at Oxford as student and teacher, returned to Glasgow as professor in 1862, when the first appointment to the chair was made, 3697, 3698; has been the only occupant of the chair, 3699; subjects treated in witness' lectures, and number of lectures in the course of session, 3700-3704; has frequent class examinations, 3705; attendance on class necessary to graduation in Arts, 3706; average number of students, showing gradual rise, 3707, 3708; accounts for increase because class is made compulsory as an alternative between witness' chair and others, 3709-3711.

Emoluments of chair. — Average



emoluments during the last three years has been £650 per annum, 3712-3714; is of opinion that the Government salary of £200 should be doubled, income from fees being precarious, 3713, 3715-3718; does not think arrangements as to retiring allowances are satisfactory; condition as to a medical certificate being given is objectionable, 3719; has to propose that a certain period of service should entitle a professor to allowance, without any proof of inability to do his duty, 3720.

Functions of General Council.—Would very much deprecate any addition to the powers of the General Council, 3722, 3723.

Course of study and regulations for graduation in Arts.—Is favourable to reinstitution of B.A. degree, and thinks that any two of the present three departments for M.A. might give a degree corresponding to the old B.A. degree, 3724-3727; B.A. degree when witness was a student, and proportion of B.A.'s to M.A.'s was about two to one, 3728-3733; suggests the inclusion of English Literature for degree with honours, 3734-3736; holds that as teaching from the chair of 'Logic and Rhetoric' naturally covers a portion of the same ground as that of English Literature, future commissions of the former should revert to the old title of 'Logic and Metaphysics,' 3736; comparative educational value of witness' chair as compared with those of Latin, Greek, Philosophy, and Logic, 3737-3739.

Entrance examinations.—Is adverse to the institution of an entrance examination which would altogether exclude a student from the College, 3740-3744.

New Faculties or degrees.—Has to suggest institution of some honorary degree lower than that of LL.D., which might be conferred on gentlemen who have not had a University training, but who have distinguished themselves in public life and literature, 3745-3748.

New professorships or lectureships.—A professorship of Modern History is required in Glasgow; witness has remarked portentous ignorance of some of his students in Civil History; failing a forthcoming endowment for a separate chair, History might as a subject be connected with the chair of Literature, 3749; there

might be a degree in Literature and History, and an examination in one or the other, and this might go along with Philosophy and Law, 3750, 3751.

Assistance for professors.—Thinks present arrangement in regard to assistance to the professors is so far unsatisfactory that it requires extension; has to propose that assistants, endowed by Government, should take portion of the practical work of the classes, such as the correction of exercises, 3752-3757; reserving the competitive work to the inspection of the professor himself, 3760.

Length of University sessions.—Is strongly in favour of beginning session in middle of October, and ending in the middle of April, say six months, 3761-3764; objects to present system in Glasgow, of students voting prizes in their class, and would abolish it altogether, 3764-3767, 3774-3777; would leave the adjudication to the professors to judge by marks, 3768-3770.

Appointment of professors.—Thinks that present written declaration required from every professor in Arts on taking office, that 'he will not, directly or indirectly, teach anything contrary to the Scotch Confession of Faith,' should either be abolished altogether, or at least the word 'indirectly' should be removed, 3771-3773.

Election of Rector.—Has a preference for election by 'nations,' but thinks it would be an improvement to increase tenure of office from three to four years, as lessening the disturbance to study during elections, 3778.

Financial position of University.—The existence of the heavy debt is like a millstone about the neck of the University of Glasgow; suggestion that, by disposal of the valuable collection of coins in the Hunterian Museum, through the assistance of Parliament, a considerable sum might be rendered available towards diminishing this serious debt, 3780-3783; roughly speaking, the debt may be put at £40,000, while the value of the coins has been calculated at a minimum of £20,000, 3784-3788.

Mode of appointment to bursaries.—Witness' opinion, in common with that of colleagues, is, that the close bursaries that remain should be thrown open to competition, 3789, 3790.

Extra-mural teaching.—If there is

any, it will be necessary to see that the same fee is exacted, 3791.

**NICHOLSON, PROFESSOR H. A., St. Andrews.**—Is Professor of Civil and Natural History in the University of St. Andrews, and was appointed in spring of 1875, 4028, 4029.

Course of study and regulations for graduation in Faculties of Medicine and Science.—Calls attention to the fact that Durham University has taken the privilege of giving degrees to Medical registered practitioners over forty years of age, upon conditions which are exactly the same as that under which Medical degree is given at St. Andrews, 4080-4083; fee charged for graduation, fifty guineas, by Durham is the same as at St. Andrews, 4034; at present, St. Andrews can only give ten degrees each year; thinks it would be advisable to increase the number of degrees, and so secure a larger number of candidates at St. Andrews; from 75 to 90 per cent. of present candidates come from England, and are for the most part members of the College of Surgeons, London, 4035-4044, 4049-4060; reasons for a majority of candidates coming from England, 4045; thinks the number of degrees at St. Andrews should be increased to twenty-five or thirty, instead of remaining at ten as at present, 4061; there is not a very extensive provision at St. Andrews for teaching any of the subjects connected with Medical Science; only hope of getting a full teaching staff is in having a Medical College in Dundee, where beds could be procured in the hospital, 4065, 4066; information as to lectures given in Dundee by professors of St. Andrews, and the prospect of continuing them, 4067, 4068; suggestion that, having a Science degree, St. Andrews ought to have a Science Faculty, which should carry on its operations chiefly in Dundee, 4069.

Creation of new professorships.—Would require two additional chairs, one for Engineering or Mechanics, which there would be very little difficulty in getting founded or endowed by Dundee, and a chair of Botany, 4070-4075; believes that necessary buildings and apparatus would be furnished by Dundee were a College of Science founded there, 4076-4081.

University Museum.—There is a good museum of Natural History, but it is not the property of the University in any manner which enables it to be efficiently used, 4082, 4083; it is the joint property of the University and the Literary and Philosophical Society of St. Andrews; copy minute of the Literary Society, showing the exact footing upon which the University and Literary Society hold the museum, 4084-4086; rules drawn up in 1875, which witness thinks are of such a nature as practically to render the use of the museum largely inoperative, 4086; it would be desirable to have a class museum separate from a museum for public exhibition, 4087; this could be provided at a probable cost of from £100 to £150, 4088-4092; thinks the University could acquire the sole right to the present museum by compensating the members of the Society, and that this would be advisable, 4093-4095; present buildings are quite sufficient for existing classes, but are much in want of laboratories, 4096, 4097.

Emoluments of professors.—Witness thinks the emoluments of his chair are very much below what they should be, 4102-4111; does not think £300 is sufficient for a professor in any University; witness' salary at Durham in the chair of Natural History was £450, which he does not think by any means too much, 4112-4115.

**NICOL, PROFESSOR.**—Is Professor of Natural History in the University of Aberdeen; formerly occupied the same chair in Marischal College, Aberdeen, to which he was appointed in 1853, and on the union of the two, King's College and Marischal College, was appointed to the present chair, 5645-5648; previous to the appointment to his first chair in Aberdeen, was for four years a professor in Queen's College, Cork, 5649, 5650; has not been a member of the University Court, but is a member of the General Council, and also of the Senate, 5651, 5652.

Constitution and powers of the University Court.—Has no objection to the representation of the General Council at the Court being increased by means of additional assessors, 5653-5658; but would prefer, as

likely to improve the constitution of the College, that they should send a representative to the Senatus rather than to the University Court, 5653-5657.

Course of study in the Faculty of Arts.—Witness is a member of the Faculty of Arts, and his chair is also in the Faculty of Medicine; in the latter it is called Zoology with Comparative Anatomy, while in the Faculty of Arts it is called Natural History; and witness lectures on Zoology and Geology; with regard to the course of study for degree of M.A., thinks that Natural History and the Natural Sciences generally are not fully and fairly represented in the curriculum of the Scotch Colleges, 5659-5665; would be inclined to allow the students to get an option of taking one or more classes in Natural Science, instead of the senior classes of Latin, Greek, and Mathematics; would make one Natural Science class imperative in the curriculum of the Scotch Colleges, and still retain Latin, Greek, and Mathematics, 5666-5669; has also to suggest that a pass in all the subjects when taking the degree should not be imperative, and that if a student passed creditably in six out of eight subjects he should be allowed to dispense with the other two, 5670, 5671.

Institution of new degrees.—Would not favour the institution of a lower degree than that of Master of Arts, 5672-5677, 5681-5684; views in regard to preliminary examinations in Medicine; so-called 'preliminary' examination may at present be passed any time students choose to take it up; thinks the preliminary should be restricted so as to be passed at the beginning, before the students commence their Medical studies, or, at the latest, at the end of the first year; would also recommend that there should be a better definition of some of the subjects, 5678-5680.

Entrance examinations.—Not required in the Faculty of Arts in Aberdeen, because the bursary competition serves the purpose, 5685-5689; in witness' experience, they had entrance examinations in the Irish Colleges, but thinks they did not work well, 5691-5698; has often found that a student may profit by University classes who could not pass an entrance examination, 5690.

Curriculum in Arts.—Desires to draw attention to the want of encouragement through prizes to Natural Science in the University; while other classes have large endowments, the only encouragement in Natural Science is a prize of £10, given by the Senatus to the student in honours who takes the best standing, 5698-5700, 5704-5706.

Assistance to professors.—An assistant is very much wanted in witness' class, and in that of the Professor of Botany, 5701-5703.

Expediency of instituting new degrees or Faculties.—Desires that M.A. degree should remain unchanged, 5707, 5708; does not consider it necessary to encourage optional or favourite studies, 5709.

Conditions of tenure of bursaries.—Some bursars, by taking a bursary in the second year, forfeit one year of the bursary; has to recommend that a student should in all cases be allowed to hold the bursary for four years, 5710-5715.

Curriculum in Faculty of Medicine.—Objects to present system requiring students to go back, in from two to five years, to the same class for purposes of examination; would suggest as a remedy, that professors should be compelled to condense the teaching of their subjects so as not to require students to attend a class during more sessions than are prescribed by the Ordinances, 5716-5721; wishes to mention that in the summer, in Aberdeen, there are courses of 100 lectures delivered in three months, which are too many for the time; the result is, that a student may do all the work in nine months, while two years of University attendance is acquired, 5721-5723; suggestion that the time of examinations in several subjects should be changed, 5723; objects to the visits of the Medical Council in London, who visit the examinations in Aberdeen, and publish reports upon them, 5726-5734.

Creation of new professorships.—Objects to proposal to put Geology and Zoology into separate chairs, 5735-5738; does not think new professorships for endowment of men of science are much wanted, 5739.

Apparatus for professors.—Is for treating the professors very liberally

in regard to grants for illustrating their lectures, but is of opinion that if the professor was made to pay 10 or 15 per cent. on all new apparatus, a good check would be furnished on unnecessary expenditure, 5740.

University museums.—There is a good museum, formed principally of presents, but scientific assistance to keep the collection in order very much wanted; witness has for above twenty years gratuitously taken the entire control of the collection, 5741–5747.

Length of University sessions.—Witness teaches a summer class for Medical students, but thinks it hard to be teaching winter and summer; only remedy for this double work would be that the summer session should be conducted by an assistant, 5748–5756.

Extra-mural teaching.—Would not have any objection to introduction of extra-mural system of teaching in Aberdeen, but sees no room for it, 5757–5759.

Retiring allowances of professors.—Thinks that a man who has taught for twenty-five years should have an optional right to retire, but is of opinion that a professor who has given up lecturing might remain in the *Senatus* as an emeritus professor, for the benefit of his experience, 5760–5770.

OAKELEY, SIR HERBERT.—Is Professor of Music in the University of Edinburgh, and has been so for twelve years; average attendance of his class has been about eight; but witness has also a choral class of some 200 students, forming the 'University Musical Society,' which meets at his class-room once a week, 12,002–12,006; University of Edinburgh has not been in use to grant degrees in Music; thinks such degrees ought to be conferred by the University, 12,007, 12,008; witness' views on necessity of granting degrees, in prepared statement, read, furnishing details as to Musical graduation at the Universities of Oxford, Cambridge, London, Durham, and Dublin; nature of examination which witness would propose in the case of candidates for a degree in Edinburgh, should such be arranged by the *Senatus Academicus* and University Court; views of *Senatus* on this subject, as contained in excerpt minutes of *Senatus* read by witness,

12,009–12,013; in effect, has to propose that the examination in Music should be very much of the same character as has been conducted at Oxford, Cambridge, and Dublin, 12,014–12,016; would not require from a candidate for a degree any attendance at the University, except perhaps for a session, 12,017–12,020; does not think proficiency in Mathematics a necessary preliminary to the study of Music, 12,021–12,023; in short, in dealing with preliminary examination, does not think that one course of study might be better than another in preparing a student for the scientific study of Music, 12,024–12,029; referring to the preliminary education required in the Medical Faculty, would be inclined to substitute for Latin, with a view to Musical education, French, German, or Italian, with a decided preference to German, as the most useful, 12,030; as regards other subjects, is not inclined to express any fixed opinion, 12,036–12,039; examination hitherto referred to, both preliminary and final, in Musical Science, has reference to the Bachelor's degree only, 12,041; would propose to confer the degrees of Bachelor of Music and Doctor of Music, 12,040; for latter degree would require much higher examination, with an interval of at least five years between Bachelor's and Doctor's degree, 12,042, 12,043; course of instruction given in theory, harmony, and in counterpoint, also in the study of some instrument, 12,044; has no lectures, properly so called, but each student comes twice a week, 12,045–12,050, 12,054, 12,055; fees for smaller class are the same as for the other Arts classes, 12,051; accommodation and appliances, particularly the collection of instruments, are good, 12,052; thinks no degree should be given without a certain amount of general culture, 12,053; is doubtful whether any special attendance at the University, irrespective of the attendance at the class of Music, should be made compulsory; is not even prepared to impose the necessity of attendance on the class of Music, 12,056–12,058; there is no class in Oxford, Cambridge, or Dublin, 12,059; would desire that University should have the power of granting honorary degrees in Music, 12,060; discussion of this proposal, 12,061–12,069.

OGG, WILLIAM F.—Is an Advocate in Aberdeen, and a member of the General Council, 9781, 9782; comes to give evidence on the nomination, and to represent the views of the General Council, 9783, 9784.

Constitution and powers of the University Court and General Council.—Thinks the Chancellor ought not to have a veto; also that he ought to be elected, not for life, but for eight years, being eligible for re-election at the end of eight years; as on these points a report was made, which the Commission had got, it is unnecessary for witness to go over the said points, 9785-9787; reference to a motion at a meeting of the General Council of Aberdeen, at which it was considered whether the utility of the University might not, as a substitute for secondary or higher education, be extended by means of a series of lectures on the subjects of—1. Chemistry; 2. Natural Philosophy; 3. Natural History (Geology and Zoology); 4. Botany; 5. Anatomy and Physiology; 6. The English Language and Literature, with suggestion that the expenses connected with these lectures should be covered either by a Government grant of money to the extent of £100 for each course of lectures, or by a fee for each course of 7s. 6d. or 10s., assuming the class should exceed forty, 9788-9741; is aware that some courses of a similar kind have been given by professors of St. Andrews in Dundee, 9742, 9743, 9756-9775; the classes should be open to the public, irrespective of matriculated students, 9744-9751; is aware that some people think the Universities are doing too much of the work of secondary schools now, but of opinion that there is no other machinery to overtake the work, 9752; from applications to teach the subject, it is contemplated to make Latin one of the subjects, 9753-9755.

Functions of the General Council.—Speaking for the Aberdeen Council, they wish to have two additional representatives for themselves, and propose to give the Senatus one additional, 9776-9791.

PATON, DAVID H., LL.D.—Is first Classical Master of the Glasgow High School; was educated at St. Andrews, and is a Doctor of Laws of that University, 11,263-11,268; has been

connected with the High School in Glasgow for nearly eleven years, 11,269, 11,270; number of pupils who attend the High School, and average time they remain there, 11,271-11,275.

Entrance examinations.—Is favourable to institution of entrance examinations, on the ground that the intending student would go through entire curriculum of High School, in order to be able to profit by the higher work of the University, 11,276-11,281; degree of stringency witness would propose for entrance examinations, ought at least to equal the average standard attained in the senior classes of higher class schools, 11,282-11,285; further thinks that if a higher standard were demanded by the Universities, that would go far to raise the standard in the schools, 11,286; statistics as to the extent to which the higher education is still given in the primary schools in the west of Scotland, 11,287-11,289; suggestion that School Boards should be empowered to grant bursaries, to enable boys who have commenced the higher subjects of study in the primary schools to continue these at a secondary school, prior to entering the University, 11,290-11,294; thinks a compromise might be made with senior students from the country anxious to enter the University who are too old to go back to school, by fixing an age at which they could enter without an examination, 11,295, 11,296; thinks that if an entrance examination were imposed upon all students under sixteen years of age, the habit of leaving the High School too soon would be effectually stopped, and it would tend to obviate the overlapping of the work of the professor with the work of the teacher of the secondary schools, 11,297; is of opinion that an alternative proposal, that a stringent examination should be held at the beginning of the second year, would not be so effective as an examination at beginning of first year, 11,298-11,305; considering education in all parts of the country, admits there might be a little hardship to students in instituting preliminary examinations, 11,306, 11,307; in favour of a school 'leaving' examination, and opinion as to best manner of constituting a proper body of examiners for this purpose, 11,308-11,316; many young men leave the junior classes in the High School

before reaching the fourth or fifth classes, most of these to enter a mercantile life; of opinion that this is not because merchants object to more highly educated boys, but because the kind of work a boy gets to do in an office in Glasgow as a beginner is such that he requires to be pretty young to go through it, 11,317-11,330.

PAULI, PROFESSOR, Göttingen.—Is an honorary LL.D. of the University of Edinburgh, also a Doctor of Civil Law of the University of Oxford, 4885, 4886; is at present Professor of Political History in the Faculty of Arts in the University of Göttingen, 4887, 4888; was formerly Professor of Modern History at Tübingen, 4889; has, from having lived in this country at various times, taken great interest in the Universities here, also from being in a way connected with it through his chief subject, the Constitutional History of England, 4890, 4891; before witness gives his evidence, has to state that he is not here to recommend any German institution, being thoroughly convinced that just as it is impossible for the Germans to transfer the English Constitution to their political institutions, so it is impossible that their educational system can be transferred to English or Scotch institutions; but by comparing the two systems a set of conclusions may be reached, 4892.

Course of study and regulations for graduation in the various Faculties.—Has to state that in Germany the taking of a degree in Faculty of Arts is not necessary, because no degree confers any privilege in regard to the public service at all; those who take it do so from a sort of vanity; that is a consequence of the centralized system of State examinations, which are undergone before a Commission instituted by the Government, or by the Ministry, in connection with the branch of the service for which the examination is to be held; for instance, in the Faculty of Arts, in which all the teachers in the middle schools and *gymnasias* are brought up, the majority of these teachers never take the degree of Doctor of Philosophy, which corresponds to the M.A. degree here, but undergo before the official Commission an oral and written examination by first-rate men, in whatever subjects they go in for,—some choosing Mathematics and all the

branches of Natural Science connected with that subject, others Classical Philology; then there are classes for History and the Modern Languages; in middle-class schools, those men are most welcome who can pass in a combination of the subjects, which are taught to a great height only in the Universities; for the Natural Sciences there are the Polytechnic schools; for these Government examinations there is a board in each of the eleven provinces of Prussia, generally at the place where the University is, 4892-4897; the Commission examinations to a certain extent correspond with the English Civil Service examinations, there being similar Commissions for all the Faculties; the Faculty of Law in Germany produces those men who go in for the bar, from which the judges of the different courts are taken; it also produces a large number of the men who go in for general administration, such as police, finances, and all the practical branches of the Civil Service, resting principally on Political Economy; these men all undergo a training in pure Law at first, and then during four years can go on attending all the lectures and classes which prepare them for any branch of the public service; some of these branches are not represented in the Faculty of Law, but are to be found in the Faculty of Arts; on leaving the University, students go up to the Commission, where they undergo two examinations; the first, which takes place immediately on their leaving the University, is the most scientific and theoretical; they then go as apprentices, as it were, either in a court of law, or in a railway or a police administration, or in the Home Office, and, having learned there the initiative of the practice they intend to follow, after two or three years they pass their second examination; the same thing is the case with regard to Medical men, although from tradition or fashion the latter usually take a degree, to do which implies another examination before the Faculty, but there is no necessity for this in any German State, 4893, 4905, 4906; in Commissions for examination with a view to service of the State, the Universities are represented, 4894; the appointment of these Commissions is a very delicate sort of public service, and is usually entrusted to the

chief clerks of the minister whose department corresponds to the Commission,—the Minister of Instruction, the Home Minister, or the Minister of Law,—these chief clerks being all men of a University education, 4895, 4896; proportion of students in the Faculty of Arts in Göttingen who on an average take the degree of Doctor of Philosophy, 4898–4902; degree of Doctor of Laws very seldom taken in Berlin, from its being very rigid and rigorous, but to Heidelberg, Leipsic, Tübingen, and Göttingen students come to take their degree, 4903, 4904; as before stated, the system here explained is a sort of Civil Service examination, but one for which University training is imperative, and the man who had passed the *abiturienten* examination, but had only got his additional information by private study, would not be accepted by the State examiners, 4907–4911.

Course of study and graduation in the Faculties of Arts, Medicine, and Law.—Does not see the possibility of introducing the German system, but thinks the course of study might be improved by increasing the higher and middle schools, and taking the elementary courses out of the hands of the professors, 4912, 4917–4919, 4978; is also of opinion that in addition to present three departments there might be added that of History, 4920–4922; of opinion that the Faculty of Law and other professional Faculties might be made a sort of board of examination for the public service, by extending the functions of the Faculty of the University to something similar to those of the German Governmental Boards, 4912–4916; the *Real-schule* described; these were established with a view to substituting for Greek, Latin, and Mental Philosophy, the teaching of the Mathematical and Physical branches of Science and the Modern Languages; men who attend the *Real-schule* are qualified to take appointments in the *Real-schule*, or as civil engineers, also in all sorts of private establishments and public financial establishments; they have further the privilege of attending the classes of the University, and, under certain conditions, with limited privileges, may enter the Faculty of Arts, 4924–4938.

Creation of new professorships or lectureships.—In the Faculty of Arts the subject of History should be represented; at Göttingen there are three

full chairs for History, one for Ancient History, and two for Mediæval and Modern History, and a class of younger men (whom witness would very much like to see in this country), the *Privat-docenten*, who prepare themselves for these chairs; these must have a degree according to their specialty, 4939–4942; is aware that here a man may become a master of any school without even having a degree; thinks this a bad system, and would certainly have no teacher of a middle-class school without University training, 4943–4946; of opinion that there ought to be one or more Professors of Modern Languages, and certainly one more for the Comparative Grammar of these languages; system pursued at Göttingen in the teaching of these languages described, 4948–4956.

Expediency of instituting new Faculties or degrees.—Witness approves of the system in Scottish Universities of having separate Faculties, and degrees attached to each of them, 4960, 4961; considers expediency of having any further Faculties than those of Arts, Medicine, Law, and Divinity is a great problem; some of the German Universities have advanced from the old number of four to seven and to five Faculties, 4962; information as to degree in Science, and division of the subject into sections, in various German Universities, 4963–4978; of opinion that the degrees of Arts and Science should be represented by one Faculty only, although the degrees may be conferred for different purposes, 4973, 4974.

Extra-mural teaching.—Cannot give an opinion as to propriety of introducing extra-mural teaching into Faculty of Arts in Scotland, but explains system as practised in Germany, by the appointment of extraordinary professors, and the *Privat-docenten* who have taken a degree in their Faculty, 4975–4977, 4981–4987; in Germany a man may take his degree although he receives his whole instruction from these private teachers, 4979, 4980; statistics of cost of the Prussian Universities to the State for the year 1875, 4988–4993.

PETTIGREW, PROFESSOR, St. Andrews.—Is Professor of Medicine in the United College of St. Andrews, has only been so for one session (since November 1875), 2934–2936.

Regulations for graduation in the

Faculty of Medicine.—Witness has, in conjunction with his colleague, Professor Alleyne Nicholson, prepared a memorial to lay before the Commission, explaining their views on the privileges possessed by the University of St. Andrews with regard to graduation in Medicine, 2937, 2938; the said memorial as read, 2939; in view of the fact that as, by a new regulation of the University of Durham, it will be possible for Medical men of a certain age to obtain there a Medical degree without residence, and on similar conditions to those existing in St. Andrews, witness has to suggest that, as the number of degrees Durham may so grant is unlimited, and St. Andrews is restricted to ten degrees per annum, the number in the case of St. Andrews should be increased, to what extent is left in the hands of the Commission, but witness thinks not less than twenty-five should be allowed, 2940; is not decided as to number to which examiners should be increased, 2941–2951; if such relaxation took place as to number of degrees which could be conferred, would be disposed to introduce a competitive examination for these, 2952–2969.

Working of witness' own chair.—As Dean of the Medical Faculty, has a very heavy correspondence to conduct with candidates, which is a work of great labour; entire management and responsibility of the Medical examinations are delegated to witness; considering the work is extra-professional, it should be remunerated, 2970–2972; department of Medicine taught by witness is Physiology, otherwise called the Institutes of Medicine, 2973; had no students last winter, but had a class of over 300 in Dundee, 2974; statistics of attendance on classes of witness' predecessors in the chair, 2975–2978.

Apparatus for chair.—Chair is not at all well equipped with laboratory or teaching apparatus, 2979; in Dundee, last winter, the professors of St. Andrews gave five courses of lectures to large classes, the audiences numbering 300; five courses were given, by the two principals and three professors, for one guinea, 2980–2984; one-third of audience might be females; the whole audience varied much in age, say from fifteen

to seventy, majority being middle-aged, 2985, 2986; possibility of continuing such a course of lectures considered in respect to probable remuneration and obtaining necessary apparatus, 2987–2998; proposal to establish a College of Science at Dundee in connection with St. Andrews University discussed, 2999–3004; would require more professors for the accomplishment of that scheme,—a Professor of Mathematics, a Professor of Applied Physics, and a Professor of Engineering, 3005–3010; proposed new degrees and curriculum for these in event of Dundee scheme being established, 3011–3013.

Entrance examinations.—Thinks entrance examinations are desirable, but it would be a pity to pitch them too high, lest many able men who have not had an opportunity of attending a good provincial school might be excluded from entering a University, 3014, 3030; is not decided as to whether Science students should attend all their classes at Dundee or part of them at St. Andrews, 3015–3018.

Regulations as to election of University officers.—Proposal that the Curatorial and University Courts, which elect to University chairs, should be considerably augmented; thinks this end would be best gained by establishing a general board of delegates, numbering say fifteen, from the four Scottish Universities, with an augmentation from clerical, legal, medical, and other outsiders, 3019; this proposal further discussed, 3020–3029.

Emoluments and retiring allowances of principals and professors.—It is quite evident to witness that the salaries of the principals and professors of St. Andrews are inadequate; judging from other professions and callings, no professor should have less than £600 per annum.

Condition of museum.—The museum of the University of St. Andrews requires extension and endowment.

PHIN, REV. DR.—Is a Doctor of Divinity of the University of Edinburgh, where he was educated, 8114, 8115; is a member of the General Council, and was for four years representative of the Council in the University Court, 8117, 8118.



Constitution and powers of the University Court.—Thinks Court would be improved by addition of another member from the General Council, 8119, 8120, 8149–8163; is of opinion that the Council should have a veto on any proposal made by the University Council under section 12, sub-section 2, of the Universities Act of 1858, 8121, 8122, 8135–8141.

Functions of the General Council.—Thinks there should be a quorum fixed of, say, fifty in attendance, without which Council should not proceed to business, 8123–8128; in the event of a quorum not being present, would postpone the meeting of Council to next ordinary meeting, and thinks that meetings twice a year are quite sufficient, 8129–8134, 8142–8148.

Manner of election of University officers.—Is in favour of transference of the patronage of University chairs to the University Court, and thinks the Court is a better body to exercise patronage than the Crown or than private patrons, 8164–8168; sees no objection to introducing a new element into the Curatorial body, in the shape of a nominee or nominees of the Crown, assuming always that the University element gets an additional representative, 8169, 8170.

Extra-mural teaching in the Faculty of Arts.—Is inclined to think that it ought to be extended to the Faculty of Arts as it now exists in the Faculty of Medicine, provided that the fees in the extra-mural classes did not undersell those of the professors, 8171–8181; and that it was confined to teaching by graduates only, 8190.

Finances of the University.—Calls attention to the fact that *Senatus* are allowed to sanction certain payments of which the University Court may know nothing until the expenditure has been made, and would desire that the Court should have the means of expressing their approval or disapproval before it is made, 8182–8189.

PIRIE, PROFESSOR, D.D.—Is Professor of Church History and Divinity in the University of Aberdeen, and has been so since the date of the last University Act; was before that time in Marischal College, to which chair

he was appointed in 1843, 2586–2589.

Constitution and powers of University Court.—Has been for some time the assessor for the *Senatus* in the University Court; admires the constitution of the Court in so far as parties are represented in it, but thinks the number of its members should be increased, there being occasional difficulty in procuring a quorum, the quorum being four, while the members of the Court are six, 2590–2597; for this and other reasons, having a regard to representation of the various parties constituting the Court, is of opinion that the number of members should be increased; would do so by adding three new members, an additional assessor appointed by the Chancellor, one appointed by the General Council, and another appointed by the *Senatus*, so increasing the Court to nine, 2598–2603.

Functions of the General Council.—Would be very much inclined to give the Council a veto upon all proposals for new Ordinances or for changes in the Ordinances, 2604–2610; favours proposal to allow Council power to appoint committees, such as with respect to the management of the library, and a number of other matters, 2611, 2612; would not give the Council the power of adjourning their meetings or to call *pro re nata* meetings, 2613–2615.

Course of study and regulations for graduation in the different Faculties.—Is inclined to think that, with regard to Medical Faculty, the course of study in the Medical classes should be so far modified as that care should be taken that the *ab extra* preliminary examiners should have their reports carefully attended to; witness makes this suggestion, because cases have come to his knowledge in which the examiners' report, which was adverse to the entry of the student, did not prevent the matriculation of the student, 2616–2626; further, with regard to graduation in Medicine, agrees with the general impression, that some of the subjects assumed to be embraced within 100 lectures can hardly be contained within that space, and that it would be desirable to lengthen the time, 2627.

Course of study in the Faculty

of Arts.—While inclined to require attendance upon the same classes which now entitle to the M.A. degree, is of opinion that the present fixed rotation of classes in the various years should no longer be absolutely required, so that a student going up for a degree might take what classes he chose in any year or sequence, 2628–2635.

New Faculties or degrees in Arts.—Would limit the degree in Arts to M.A. alone, 2636, 2637; with regard to Divinity and Law, thinks there are too many degrees given, and would not object if a veto upon them were given to the University Court; would have no degrees in Divinity except honorary degrees, 2638, 2642–2644; and when an honorary degree in Divinity or Law is given, the grounds of giving it should be intimated, and, if possible, published, 2645–2647; witness thinks the degree recently introduced into Aberdeen, of B.D., on examination, should be excluded altogether, 2639–2641.

Entrance examinations in Faculty of Arts.—Is not disposed to recommend their introduction, 2648; no entrance examination at Aberdeen, except competition for bursaries; does not think the argument against entrance examinations founded on that sufficient or satisfactory, 2649–2655; witness' reasons for objecting to an entrance examination, first, because there should be no restriction to entrance to University, if it can possibly be avoided; second, that attendance at College, even for a young man, or boys not very well qualified, benefits them more than attendance at school for the same length of time; third, by excluding such students from junior classes, and instituting an examination, professors would thereafter be bound to teach lower, and down to the level of that entrance examination, 2656, 2657.

New professorships or lectureships.—Not aware of any professorships or lectureships wanted in the Arts or Divinity Faculties; is rather inclined to say that in some of the Universities there are professorships that could well be dispensed with; considers, for example, that a chair of Education is useless, the subject cannot be taught in that way; also holds a chair of Rhetoric to be

perfectly useless, does not believe a rhetorician can be made, 2660–2663; assuming that, as in Edinburgh, English Language and Literature are really the subjects taught by the chair of Rhetoric, is equally of opinion that the teaching of these subjects is superfluous, 2664; again, it has been witness' impression for a long time that a professorship of Moral Philosophy is useless, and indeed may be mischievous, 2665; these opinions as to superfluous professorships further discussed, 2666–2674.

Length of University sessions.—Does not think there is any necessity for a change, and that a session five or six months long is about as good a length as could be chosen, 2675–2677.

Extra-mural teaching in Faculty of Arts.—Witness cannot see the slightest objection to it, but does not think there is scope for such teaching in Aberdeen, 2679–2681.

Patronage and election of University officers.—Thinks the election of Divinity professors should be given to the Church of Scotland, 2682–2685; with regard to the other chairs, is clearly of opinion that the patronage ought to be vested in the Senatus, with a veto either by the University Court or the General Council, 2686–2692; proposal discussed, 2693–2701; as to election of Rector, would abolish voting by nations, and substitute an open poll by the whole students, 2702–2704; would not have the Principal elected as he is just now; on the principle that meetings have generally the selection of their own chairman, has to submit a suggestion that he ought to be elected from the professors for a term of years, with £100 a year to pay any expenses connected with the position; alternatively, he should be made a professor, and given something to do, 2705–2707.

Emoluments and retiring allowances of professors.—Thinks some of the professors too poorly paid; does not think any professor should have less than £600 a year, 2708–2710; thinks the retiring allowances are calculated upon too low a scale, and would give a professor who has served, say, thirty years, the whole allowance, with a graduation for service of ten years one-third, and for twenty years two-thirds, of the whole

allowance, 2711-2713; is further decidedly of opinion that the present system of retiring allowances does not lead anybody to retire, 2714-2716.

\* Mode of appointing to bursaries and scholarships.—Of opinion that present mode of conducting the examination of bursars in the four subjects of Greek, Latin, Mathematics, and English Literature is apt to result in merely getting a medium man; would propose that, while a considerable number of bursaries might be left to be competed for, embracing these subjects, some should be applied to Languages, a good many to Mathematics, and a good many to Science in its various branches, and believes the result would be that the young men who came forward would be of the highest class of ability in these special subjects; would in all cases award bursaries by competitive examination, 2717-2727; there are six scholarships given in Aberdeen to young men who are leaving College, many of whom go to business, giving up all the studies prosecuted at College; would prefer, if it were possible, to make assistant professors out of those scholars and fellows, or to appoint them to lectureships in the country or mining districts, 2728-2731.

University buildings and libraries.

—Witness takes a great interest in the library; objects to payments to assistants for professors, other than those named by the last Commission, being made to a large extent out of the library fund; also considers that the sum received by Aberdeen University in compensation for loss of the privilege of Stationers' Hall is not a fair sum when compared with that allowed to other Universities, 2732-2734.

Length of University sessions.—Thinks suggestion by his colleague, Professor Milligan, that the Divinity session should be made the same length as the Arts session, is worthy of the consideration of the Commission, 2734-2738.

PIRRIE, PROFESSOR, Aberdeen.—Has been Professor of Surgery at Aberdeen since 1839, 6974-6976; is a Graduate in Arts of Aberdeen, and a Graduate in Medicine of the University of Edinburgh, from which he received the degree of LL.D. last year; endowment of witness' chair is

£150, and with fees the total income of the chair is this year (1876) £470, 6978-6980; is in practice as a surgeon, and considers this necessary to the value of teaching of his chair; has been for a long time connected with the Royal Infirmary as one of the Clinical teachers of Surgery there, but this is independent of the chair, there being no connection between the University and the infirmary, 6981-6984; of witness' colleagues in the hospital only one is a professor—the recently elected Professor of Medicine, 6985; the hospital has been in existence for more than one hundred years; it is supported by voluntary contributions, and by income from land; though unconnected with the University, there could be no teaching without it, and it is an older institution than the Medical School, 6986-6991.

Emoluments of chairs.—Witness considers that his chair is very inadequately endowed, and that all the chairs should be so endowed as to secure distinguished men as candidates for them, 6992-6995; does not think the fees should be increased; if they were made four guineas, as in Edinburgh, instead of three guineas, which they are now in Aberdeen, it would act injuriously and ruin the school, 6997, 6998; at least ten per cent. of the students come from England; these generally are first-rate men, who have taken the qualification of the Royal College of Surgeons, London, but who are induced to come to Scotland for the purpose of obtaining the medical qualification of the M.D. or M.B. degree, 6999-7005; these must stay one year in Aberdeen in order to graduate, but there is a diversity of opinion as to how the *annus medicus* should be complied with; in witness' opinion, the attendance should include one six months' winter course and two summer courses of three months, while others hold that a summer and winter attendance at certain classes constitute two *anni medici*, which can be made up in nine months, 7007-7010.

Assistants and apparatus for chair.

—There is no provision whatever for an assistant to witness' chair, and the small sum voted from the University funds for illustration is perfectly inadequate; as there is only available the paltry sum of £18 to provide instruments and apparatus,

the consequence is that if witness had not been altogether independent, so far as means are concerned, he could not have afforded to be Professor of Surgery, while it is most expensive to be paying out money for what is, and remains, the property of the University, 7011; witness' view is, that if Surgery is to be properly taught at Aberdeen, at least £100 should be allowed for instruments, apparatus, and mechanism, 7012-7016; it would further be a great advantage to get a qualified man for so many years to act as assistant, and for this another £100 a year should be allowed, 7017-7026; duties which witness would assign to such assistant, 7018, 7019; there should further be a grant for the Pathological Museum of £100, 7020-7025; regrets that no person was invited to give evidence from Aberdeen before the Royal Commission on Scientific Instruction and the Advancement of Science, 7027-7038; witness' impression that objective teaching in his subject is highly appreciated by the students of Surgery.

Is of opinion that the arrangements with regard to assessor-examiners are not the best; witness' view is that a proper sum should be allowed so that each professor should have a separate assessor, 7035; proposal discussed, 7036-7038.

**RAMSAY, PROFESSOR.**—Is Professor of Humanity in the University of Glasgow, and was appointed in 1863, 4116, 4117; has never been a member of the University Court, but is a member of the General Council, and has attended its meetings very regularly, 4118-4120.

**Functions of General Council.**—Does not think any change should be made in these, 4121.

**Constitution and powers of University Court.**—Views as to composition of the University Court, with respect to its two main functions—viz. the duties of administration, of review, and of supervision; and, secondly, those of election; witness has to speak of the Glasgow University Court more particularly; considers that at present the Court is weak in not having the academic or teaching and examining body sufficiently represented; but is not prepared to lay down any precise plan to strengthen the Court in that respect, but would

distinguish between the governing and elective powers of the Court; with regard to elections, has to refer to that part of the report of the Devonshire Commission upon Science which deals with Oxford and Cambridge, 4122-4128; thinks that in an election to a chair the subject should be represented by its special Faculty in some way in the Court, say by the dean or an additional assessor, 4129, 4130, 4158; would also like to see the Chancellor representing the General Council in the University Court in preference to his assessor, 4129-4131; this proposal discussed, 4132-4162; would not alter present powers of University Court, 4163-4181.

**Expediency of instituting new Faculties or degrees.**—Is of opinion that there ought to be a separate Science Faculty, granting separate degrees in Science, such as Bachelor of Science and Doctor of Science, and that Science cannot be treated as a special department of knowledge by being merely admitted as a part of the Arts course; is, however, of opinion that the place to be assigned to Science in general education has yet to be determined; its claims rest at present more upon theory than practice; the question to consider, therefore, with regard to the M.A. degree, is, What are the subjects that ought to be included in a general liberal education? witness' own view is, that the present course of study for Arts degree includes those general branches of knowledge, and training in those methods of thought and study, which are indispensable to a man if he is to be considered a cultured man, whatever his future calling may be; looking to the most authoritative discussions on the introduction of the study of Science, no educationalist charged with the whole training of young men's minds has as yet pronounced that out of Science can be made as effective an instrument for the discipline of the intelligence and character as out of the old branches of education; in support of this view, witness quotes from the sixth report of the Commission on Scientific Instruction in reference to introduction of study of Science into public schools, page 55, section 18; also refers to the Schools Inquiry Commission, pp. 32 and 33; witness also visited Oxford, and spent some time there inquiring of scientific and

classical teachers of eminence what has been the experience of the alternative system which has been introduced at Oxford, and thinks the evidence was almost unanimous to the effect that Science has as yet done nothing to produce a type of mind that can at all be put beside the old Classical first class man, but has been of very great benefit in inducing a number of men to read who formerly would have been idle, 4182; has specially to direct attention to the effect of the New Code in Scotland, the passes obtained for Science, gaining 4s. per head under the specific subjects of the Code, really represent no training at all; concludes that Science requires a special Faculty for itself; further, that if introduced into the Arts course, it should not supersede the old literary subjects, but should be introduced as an alternative, possibly, with some of them; and that greater play should be given to Science studied with a view to honours in the University than with a view to a pass; points out and comments upon the various proposals made with the view of changing the present M.A. course, 4188; very few obtain high honours in Classics, one reason being their discontinuance of the Classical classes to prosecute other studies for the degree; the whole course in Glasgow is, in fact, too heavy and too long, 4184; average age of Glasgow men when they take the Arts degree is about twenty-two, 4185, 4186; suggestions for removal of the evil of excessive examination, which is seen to be growing up in every University, 4187, 4188, 4288; with reference to what has been stated above, witness has to lay down, with a view to the Arts course, the following principles:—*First*, as to the length of the course, that no cutting down of the course which would in any way have the effect of lowering the standard required for a degree would be desirable; *secondly*, as regards alternatives, thinks that present course, just as it stands, has great merits, 4189, 4190.

*Institution of new Faculties or degrees.*—Has to propose the revival of the B.A. degree; special benefits of the institution of a B.A. course would be these: *First*, it would give a shorter course in Arts; *secondly*, it would feed the M.A. degree; *thirdly*, it would be a special boon to schoolmasters, law-

yers, and others, who go through a considerable portion of the course at present, and get no recognition from the University of having done so; *fourthly*, such a degree might serve as a preliminary basis for all degrees; and, *lastly*, it would present an alternative to students within the limits of the Arts course, by enabling them to omit some of the present subjects; B.A. degree should not confer the franchise, 4190, 4231–4237; various proposals of a detailed character as to curriculum for B.A. degree referred to, 4191; scheme which witness would propose, as the best and most complete, practicable for the B.A. degree, with full details of the curriculum which would be required in order to suit Medical and Science students; by introducing one Natural Science class, in addition to the ten now required, there would be eleven classes, out of which, by attendance on eight classes, with examinations in each subject, a student could qualify himself for the B.A. degree; would have no honours in connection with the degree, 4192; for the M.A. degree without honours, the pass would be obtained almost exactly as it is at present, with the alternative of attending one Science class instead of one Mathematical class; would also recommend that in the pass degree examiners should be allowed to say when a student passes with credit, and say when he merely passes, 4192.

*Pass for honours in M.A.*—Thinks it is with regard to honours that a change is most called for; would make five departments for honours; the three existing ones, Classics, Philosophy, and Mathematics, a fourth in Natural Science, and a fifth in Law and History; further details of this scheme, 4193–4196; would make attendance for such a degree interchangeable with any Scotch University, with the exception of the last year, 4197; witness' opinion of the inducement to many men to take the lower degree, 4203–4205; witness is strongly of opinion that to make Greek an optional subject, giving as an alternative Modern Languages, would be a serious blow to the whole system of the Classical instruction of Scotland, 4206–4208; this view further discussed, 4209–4229; witness, with regard to his

proposal that there should be a separate Faculty of Science, has no suggestions to make as to the constitution of that Faculty, 4244, 4245.

Entrance examinations.—Witness puts in documents relative to entrance examinations, 4246; statistics of the results of a voluntary entrance examination, instituted by witness in his own class, showing that the greatest number of failures occurred among those who were above nineteen years of age, 4246; thinks it would be desirable to institute an entrance examination, although of opinion that the primary and secondary schools, the former especially, from the action of the Code, which has a tendency entirely to stamp out the teaching of Latin, Greek, and Mathematics, are not at present in a condition to send up the necessary number of students to pass such an examination; thinks that its institution might prove a stimulus to increased effort on the part of the schools, or of the public to create better schools; witness feels it, however, a difficult question, 4248-4250; at all events, it would be desirable to institute, not an entrance, but a matriculation examination, to be passed by the students entering the University with a view to a degree; such an examination should be passed when the student first enters the University, and no class should count for a degree which is attended before passing it; students not passing an examination, or not presenting themselves, should be allowed to attend as private students, and get such benefit as they could from the teaching of the class; the professor would not address himself to them as students, and would be relieved from the necessity of lowering his teaching, 4251, 4259, 4260; such a system would have to be gradually introduced, and leniently worked at first; also thinks that an exemption should be made at first in favour of the older students; would suggest the age should be fixed at twenty, and afterwards increased to twenty-five or thirty, after which there should be no exemption; subjects witness would be inclined to include in the examination; thinks the examiners should be the present examiners in Arts, the professors, along with the

extra-mural examiners and the assistants also, 4252, 4253; sees no objection to the entrance examinations being held in local centres approved of by the University Court; further, would take a certificate from an inspector of schools that a boy had passed the third standard in Classics, and the same in Science; supposing a student failed the first year, witness is of opinion he should be allowed to go in for the preliminary examination for the three years' course at the beginning of the second year, 4254; with a view to provision for rejected candidates at the entrance examination, witness has to suggest that tutorial classes should be established, in which students failing to pass might for two or three months attend a class in the special department in which they failed, and that, by entering in November as private students, they might, if they could pass in say January, rehabilitate themselves, and be allowed to count the session as a session of attendance, 4255-4258.

*Re-examined.*—Constitution of University Court.—Witness, to put into shape what he said before, would give the Senate one additional member in the Court, in which case there would be two representatives of the Senate in the Court; should an election occur in a Faculty not represented by a professor in the Court, would suggest that instead of one of the two assessors of the Senate, a representative from the Faculty affected should be chosen *ad hoc* to serve for the purposes of that election; the Rector should not, in witness' opinion, be a member of the Court if he is to appoint an assessor, but if he does not, he might sit as at present; in addition, thinks it would be reasonable that the General Council should have one additional member; in this case the Court would consist of eight members in all, 7673-7678.

Curriculum of Arts Faculty.—Explanation in reference to witness' previous evidence as to substitution of a modern language for Greek in the curriculum of Arts; the chief ground of objection is, that Modern Languages seem to witness, as a mental discipline, to stand upon a totally different footing from Greek, and if they were admitted into the University curriculum, they would probably not be studied with a view to

culture in the way in which Greek is studied; is further of opinion that Greek is a *sine quâ non* of University education, and that the substitution of a modern language would be the substitution of an inferior implement of education, 7679-7681.

Entrance examinations.—With reference to witness' account of voluntary examination of his Latin class for five years, already laid before the Commission, he has now to add the result of the present year's examination, just completed; details given; roughly speaking, 56 per cent. of those who have failed to pass would be rejected for the University entrance examination he would propose, while 43 per cent. only would pass, 7682; witness attributes the failure of mature students to their relying too much upon the recollection of the Latin they learned at school, and has little doubt that the institution of an entrance examination would diminish the failures by one half, 7683, 7684; would specially call attention to the provision in Ordinance 14, paragraph 13, which provides that no person shall be an examiner who is not a member of a General Council of a Scotch University; is of opinion that the Council should have power to choose any graduate from any University, whether Scotch or not, to conduct degree examinations; alternatively, the difficulty might be obviated by removing prohibition in section 16 of the same Ordinance, and allowing the conferring of *ad eundem* degrees, as is done on certain conditions at Oxford and Cambridge to graduates of other Universities; would not in such a case give the franchise with these degrees, 7684, 7685; many of the Snell exhibitioners who have graduated at Oxford would be most suitable; of these, for instance, may be named Professor Bryce, who is not a member of the Glasgow General Council, though eminently fitted to be one, 7686-7688.

Creation of new professorships.—Witness has a strong opinion that a chair of Modern History should be introduced, 7689.

Provision of assistance for professors.—Is very much needed indeed; in witness' own class there is an assistant, for whom Government gives a salary of £100 a year; this is too little, and witness has supplemented it by giving £150 out of his own

pocket; no man of the calibre required can be got for a less sum, and his use in looking over examination papers is very valuable, the amount of class examination work being very heavy; 7690, 7691, 7698-7701; statement of actual manner in which witness works his class along with his assistant, and its bearing upon the question of retaining junior classes in the University, 7692; requirements of Oxford pass are greatly in excess of what is required in Scotland, 7692.

Present preliminary examination.—This was introduced by last Commission, and is now gradually becoming appreciated by the schools and the country, and is working exactly in the way desired by the Commissioners; furnishes a table of the numbers passing in Latin for the last seven years, which shows that the numbers have increased from 13 in 1870-71 to 33 in 1876-77, while in Greek the passes have risen in number from 4 to 23, and in Mathematics from 8 to 19, 7693.

Entrance examination.—Witness' opinion on proposal to have an entrance examination at end of first year to test entrance to the second class is, that it would not have the same effect upon schools and students which a *bond fide* entrance examination would have, 7694; for the case of poor students who could not pass, witness refers to his proposal previously expressed, that they should be allowed to enter as students, and have a month or two in which to prepare and try again, the session being counted if they should then pass, 7695-7697.

Combination of professorial and tutorial teaching, as introduced by witness in his own class; has organized a kind of tutorial staff from good former students, among whom the junior and senior classes are divided, and do voluntary work for the tutor at a special hour, while he looks over and corrects the exercises, etc., 7702-7704, 7706; of this staff, one holds a Euing Fellowship of £80 a year, and is allowed to charge a special fee of 10s. 6d. from each student; the others are paid for by witness, 7705; of opinion that in Latin and Greek classes there should be an assistant at £300 a year, who should be a sort of colleague to the professor; and in addition, two or three tutors in con-

nection with the class at from £50 to £100 each; should the fees be raised, as has been proposed, then professors with large classes might be called upon to contribute towards the payment of the tutors, 7706; the Arts Faculty consider it a grievance that the conduct of preliminary examinations in Medicine has been thrown upon the examiners in Arts, and witness thinks it is hard that the extra-mural examiners should have a number of papers twice a year to look over for these examinations, without any remuneration for their labour, 7706, 7707.

Length of University sessions.—Of opinion that to prolong session beyond present limits would be a great mistake, both for professors and students, 7708, 7709, 7727; all the objections against an extended single session tell equally against a double session, 7716, 7722; instead of proposed summer session, would have the work done by students under a tutorial system, 7710-7715; would, in fact, retain session as it is at present, beginning on 1st November and ending on 1st May, 7717-7721; the holidays are from one day before Christmas to one day after New Year's Day, and would not lengthen these, 7719, 7722; with a view to furnish some idea of the number of students who are engaged in employment of some kind during part or all of the year, witness gives statistics on this subject; these show that out of 283 students only 60 are really free to take the whole course, while the others only attend certain classes; it also appears that the students attend the junior Latin and Greek classes from their own choice; witness considers this a strong evidence of the popularity of the junior classes, 7722-7726; thinks the position of the professors in the Scotch Universities, so far as regards the long vacation, is unique, and renders the chairs objects of ambition, 7727, 7728; this system embraces the endowment of research, 7728, 7729.

Extra-mural teaching in Faculty of Arts.—Objects to its introduction, on the ground that it implies the introduction of competition, and is of opinion that in higher education this principle ought not to be adopted, 7730, 7731; admits success of extra-mural teaching in the Medical Faculty, but considers the case fundamentally

different with the Faculty of Arts; in the case of Medical graduates, what is of most importance is simply the knowledge; besides, in any large centre of Medical teaching, there will always be a number of men qualified to teach Medical students; there is no such guarantee in regard to teachers of Latin, Greek, or Moral Philosophy, 7732; argument in favour of extra-mural teaching, that it might supplement an inefficient professor, is, in witness' opinion, a weak one, such deficiency hardly being known, 7733; does not think that the success of the *privat-docenten* system can bear comparison with that of extra-mural teaching, because the former is strictly *intra-mural*, 7734; there is no special regulation of the University Court by which the assistant's class is recognised as equivalent to the professor's; witness thinks that it is necessary; in fact, the teaching of the assistant, to be valuable, must be recognised as equal to that of the professor; witness would extend the principle of competition, and allow a student to take the separate parts of his course in any University he pleases, 7735-7737; thinks that the effect of extra-mural teaching would be to introduce a sordid spirit into the whole work of the University, 7736; one more point is worthy of notice as to extra-mural teaching—where the examination for the degree is principally on the lectures given by the professor, an extra-mural teacher could not successfully compete with the professor, 7737, 7738.

Election of University officers.—Thinks it might be an improvement if the Rector, who is elected by a majority of the nations, was elected by a majority of the nations, was elected by a majority of the *cumulo* vote; at the same time, would not like to see the nations abolished as an institution of the University, 7739-7745; alternatively, the *Glottiana* (the Glasgow Nation) might be divided into two, making five nations, 7746, 7747.

Emoluments and retiring allowances for principals, professors, and lecturers.

—In regard to this subject, witness has to put before the Commission the report with reference to the raising of class fees by professors which was adopted by the Senate last year; paper in question read, 7748; appended to this report are tables, showing that the raising of the fee in 1812 in Edinburgh, in the



Faculties of Medicine and Arts, was followed by a rise in the number of students, 7748-7751.

Emoluments of professors.—Witness has to point out that the emoluments of professors are in most cases extremely small, and are so as compared with those of doctors, architects, and lawyers who make anything by their profession, 7752.

Retiring allowances.—Thinks it is undesirable to make the retiring allowance of a professor depend on his being incapacitated for work, and that teaching for thirty years should imply a right on the part of a professor to retire with a retiring allowance, but not necessarily making it compulsory that, being still active and willing, he should retire, 7752-7755; would give him the full retiring allowance at the end of thirty years, 7756.

Mode of appointment to bursaries, fellowships, and scholarships.—Witness was in 1870 appointed convener of a committee of the Senate to consider the Glasgow bursaries; on an examination into the deeds of the bursaries, the committee drew up a report, which the Senate adopted, and has acted upon ever since; substance of said report given, 7757-7759; witness is of opinion that poverty should not be considered as an element in administering a bursary, 7760; evidence in proof of the propriety of the total abolition of all private patronage rights with the view of throwing open the endowments to free competition, 7761; table of statistics showing the position of merit attained by each student who has obtained a bursary, either by competition or selection, between the years 1860 and 1870, 7761; in this table, 'restricted' bursaries means those confined to certain counties, 7762; does not approve of giving bursaries to boys of certain patronymics; and in all cases of that kind the Senate administers these by giving a preference to names only *ceteris paribus*, under the impression that they are entitled to do so, 7763, 7764; thinks that all bursaries should be thrown open to competition, or where private patrons object to this, the bursars appointed by them should have to pass some sort of examination, 7764-7766; difficulty has been found in adjudicating

bursaries open to first and second year students from uncertainty as to when a student may be said to be in his first or second year, 7767; witness is opposed to bursaries being open to students of the second year; it is another question whether there should not be major scholarships open to students of the third year, 7768; there are a considerable number of higher scholarships, or more properly, fellowships, connected with Glasgow University, some of them instituted very recently; a sum of £20,000, left to the University by Mr. George Clark, of Paisley, has been employed to found four fellowships of £180 a year each, tenable for four years; these are given to graduates of less than four years standing—one in Mathematics, one in Classics, one in Mental Philosophy, and one in Science; and there is a vacancy every year; then there are six others, resulting in the fact that every year there is at least one open to competition among the graduates in Classics, Mathematics, and Mental Philosophy, and to some of these the condition is attached that the holder may or shall teach in connection with the University, 7769, 7770; the extension of this system of obligatory teaching to all fellowships would be a great benefit both to the University and the fellows, 7771; considers that the Snell exhibition has been a great benefit to the University of Glasgow, 7772; witness hands in pamphlets by Mr. Kerr and Professor Islay Burns advocating competition in bursaries; also the deed of trust constituting the Scott foundation, suitable as a pattern for foundations of a similar kind; a list of the bursaries vacant this year, with the conditions on which they are to be held; a list of the scholarships competed for; and also a list of the candidates both for the bursaries and preliminary examination, 7772; considers that Ordinance 14, No. 1, requires amendment, 7772.

Provision for maintenance of University buildings.—As convener of the house committee, witness has to impress upon the Commission the impossibility of keeping the buildings, etc., in proper order without proper funds, 7773-7776.

RICHARDSON, BENJAMIN WARD, M.D.—

Is a Doctor of Medicine of the University of St. Andrews, and a Fellow of the Royal College of Physicians, London, 11,572, 11,573; is a member of the St. Andrews University Court, and has twice been elected assessor for the General Council, 11,574, 11,575; is also President of the London Association of St. Andrews Medical Graduates, 11,576, 11,577; object of that association described, 11,578; witness in his evidence, which is to be directed to the subject of Medical graduation in St. Andrews, represents the large body of Medical graduates of the London St. Andrews Graduates Association, 11,579.

Views in reference to admission to graduation, before the Ordinance of 1863.—Previous to that time an average of 72·50 gentlemen graduated in Medicine at St. Andrews, from the year 1836 to 1862 inclusive, 11,580, 11,585–11,589 (and see note under 11,598); these all being men who had undergone examinations for diplomas in Medicine and Surgery, mainly in England and before the College of Surgeons and the Apothecaries Company; the Commissioners of 1863 reported against the number of the St. Andrews degrees, and comparing these with the London University admissions to the same degree, recommended the former should be limited; witness is, with great respect, of opinion that this decision was not made on the strict merits of the case; is further of opinion that the University of London does not afford an equivalent opportunity to that of St. Andrews, inasmuch as the University of London insists that before candidates can come up for their degree they shall go through a course of hospital study, which implies their withdrawal from practice for some time; witness maintains this to be unnecessary, because these gentlemen, being already in practice on their own account, can learn everything they want in their own practice without any period of study in hospital; witness is very strong on the character of the examination, as being a good, sound, practical one, which has always been the same as that for the membership of the Royal College of Physicians, London; and when witness, in 1854, passed, first in St. Andrews, and afterwards in the

College of Physicians, a little later than that time, he found from comparison of the systems of examination, that the St. Andrews examination was the more stringent, 11,580, 11,581, 11,640; it having been stated that when seventy-six were admitted by St. Andrews annually, the men were of a very common class in their 'profession, witness' association in 1867 collected facts which proved that in that year there were no less than thirty-nine graduates of St. Andrews in the hospitals of London, either as teachers or physicians, a larger number than from any other body; while in the provinces, graduates of St. Andrews were present in three Colleges, nine schools of medicine,\* forty-three hospitals, nineteen county asylums, while conditions of thirty-nine more (conditions named) were of high standing in various capacities, and lastly, there were fifty-five Fellows of the Royal College of Surgeons of England by examination, 11,582–11,584; of 107 degrees granted in 1861, it may be said that substantially the graduates came either from England or Ireland, 11,588–11,595; witness is of opinion that the present restriction against granting more than ten degrees per annum is not so good as the previous system, 11,597, 11,598; effect of this limitation to ten from the year 1863, discussed; the Commissioners argued that the same persons could get a licence to practice elsewhere, but the licence of the Royal College of Physicians, London, of the Royal College of Physicians, Edinburgh, or of the King's and Queen's Colleges of Physicians, Ireland, does not meet the case; the men coming to St. Andrews do not want the degree for a licence to practice, they never did; but because they want the title of Doctor, and without a degree they cannot practice as consultants, 11,599, 11,602, 11,614–11,619; also calls attention to the fact that a great many men go elsewhere for degrees—to Brussels, where they have instituted an examination specially for English students, to America, to the German Universities, and now a number go to Durham, which is the rival of St. Andrews, with the advantage that there is no residence required, and the number of degrees they may grant is un-

limited, 11,599-11,601; alteration witness has to propose is, that, in view of his belief that there are from 300 to 400 gentlemen at the present time anxious to undergo any examination to get the St. Andrews degree, the restriction as to number should be removed, and that all men who have been registered as qualified in Medicine and Surgery, and who have been ten years in practice *bonâ fide*, should be admitted without regard to number, if they choose to pass through the necessary examination, 11,602-11,606, 11,614, 11,617, 11,641-11,645, 11,685; would further be willing to include amongst the examiners men from London, Edinburgh, Glasgow, or Aberdeen, and that the examination should be as stringent as the Medical Council may require, 11,604-11,613; but witness thinks the present examination at St. Andrews a satisfactory one, and nature of the same detailed, 11,624-11,637, 11,655-11,667; would have no objection to extend this system of granting degrees to persons who have been in practice to the whole of the Universities of Scotland, 11,620-11,623, 11,638-11,640; average number of candidates for the degree who were rejected was, in 1858, one in four, 11,646; cannot give present or more recent proportion, 11,647, 11,648, 11,652; of opinion that the degree should not be put up to competition, and reasons for this view, 11,649; it having been maintained that the admission to the St. Andrews degree does harm to the other Scotch Universities, in the way of preventing the pupils from going to the latter, witness' experience is very strong in the opposite direction, it being that the more graduates, properly qualified men, there are from St. Andrews, the larger will be the number of students who will go to the Scotch Universities, 11,668-11,684, 11,686; has been a member of the University Court for six years; has seen one election of a professor, but never saw voting by proxy, although present at the meeting, 11,687-11,690.

Constitution of University Court.—Thinks the representation of the General Council should be increased by two more assessors, and that each faculty—Arts, Medicine, and Divinity—should be represented, 11,691-

11,693; the restoration of the privilege of granting Medical degrees is much desired by the University of St. Andrews, as well as by witness and the association he represents, 11,694-11,697; the University Court has petitioned the Privy Council on the subject, 11,701; the fee charged is now fifty guineas, 11,698.

RUTHERFORD, PROFESSOR, M.D.—Is Professor of the Institutes of Medicine in the University of Edinburgh; has held the chair for over two years, 9428, 9429; the evidence witness has to offer is principally upon matters connected with his own chair and with the Medical Faculty, 9428-9430.

Course of study and regulations for graduation in the Faculty of Medicine.

—Witness is anxious to have an addition made to the present title of the subject taught by him, viz. 'Institutes of Medicine or Physiology;' would have the title altered as 'Including Microscopical Anatomy, Physiological Chemistry, and Physiological Physics;' witness' reason for this is that he finds the Professors of Anatomy, Chemistry, and Natural Philosophy somewhat encroach upon his province in teaching, and is therefore anxious that this Commission should make some authoritative statement that his subject includes the three branches named, witness being under the impression that the Greek roots of the term 'Physiology' mean literally Natural Philosophy; in London the Professor of Physiology in the various medical schools is also the teacher of Microscopical Anatomy, and the Professor of Anatomy gives the Physiology of the bones, joints, tendons, ligaments, and muscles; this witness knows from having been in London five years, and being an examiner in the University of London, 9431-9433; there is objection to more than one teaching the subject of Physiology to the same extent; on the other hand, witness thinks it expedient that he should teach a considerable part of Anatomy—viz. Microscopical Anatomy, and that he should be more definitely recognised as a teacher of that department; so also with Chemistry, witness thinks that it is not expedient that the Professor of Chemistry should teach the Chemistry of respiration or that of the blood, as

these are things which witness is obliged to teach in his course; again, in regard to Physics, witness' tuition of Physiological Physics should not be overlapped by the tuition of the Professor of Natural Philosophy, 9484; does not think that any objection on the part of the Professor of Anatomy to witness' suggestion would be reasonable, 9435, 9436; consequently is of opinion that a separate chair for Institutes of Medicine is quite a necessity, because it unites considerations founded on Anatomy, Chemistry, and Physics, which could not be united by any other professor, 9437-9441.

Course of study in Medical Faculty. — Recommends that to section 5 of Ordinance 5 there should be added the subjects of Practical Physiology and Practical Pathology as compulsory subjects, 9442-9445; with regard to Natural Philosophy, witness is of opinion that rather than it should be made part of the preliminary examination, the subject should remain as it is, unless a fifth year be added to the curriculum, 9446-9450; is of opinion that it would not be advisable to make the curriculum five years; is convinced that Pathology should not be taken as at present, at the second of the professional examinations for the degree in Medicine, at the end of the student's third year, and would relegate it to the last examination—viz. the third at the end of the fourth year, 9452-9486; with reference to a proposal that a student should pass his examinations in every branch immediately he has attended the course in that branch, does not believe that that method would be found to work well, 9453-9455.

Expediency of instituting new Faculties. — Thinks a separate Faculty of Science would be advantageous to the University, 9456; classes which witness would include in such a Faculty, 9457-9461; as regards Medical Faculty, does not think that any new chairs or lectureships are required, 9462-9467.

Assistants to and apparatus for professors. — Witness urgently requires two assistants instead of one; has at present one assistant, paid £100 a year out of University funds; this sum is too little, and would suggest that there should be two assistants, at £150 each, for

witness' department; witness at present pays an additional salary to his assistant, 9468, 9469; with regard to apparatus, when witness came to the University of Edinburgh he found his predecessor had sold all his own apparatus; witness had in consequence to expend £1000 for the apparatus actually essential for tuition, 9470; in order to provide for class expenses, and for the purchase of apparatus, would require £150 a year, 9471; at present witness gets £50 a year, in addition to which he spends £110 a year, 9471, 9472.

Length of University sessions. — Thinks it is inexpedient to change the time of commencement and ending of the winter and summer sessions in the Medical Faculty, 9473; thinks that it would not be judicious to raise the fees till the new buildings are erected, and opinion as to how any increase of fees should be regulated in the several Faculties, 9477-9479, 9484.

Extra-mural teaching. — While witness is of opinion that extra-mural teaching is, on the whole, a benefit, it would not be advisable to allow the students to take all their classes outside the University, 9480, 9481; thinks that if extra-mural teaching were introduced into the Faculty of Arts many students would, to save themselves trouble, prefer a system of 'cramming' to that higher tuition which alone is education, 9482.

SANDERS, PROFESSOR W. R., M.D. — Has been Professor of General Pathology in the University of Edinburgh since 1869, 4261, 4262.

Course of study and regulations for graduation in the Faculty of Medicine. — Would propose leaving out, or making optional, as a part of the Medical course, the Elements of Mechanics in the preliminary examination, and making Natural Philosophy a compulsory class, 4263-4266, 4280, 4281; would add Practical Physiology and Pathology to the classes which require to be attended, 4267-4270; thinks the courses of Clinical Medicine and Surgery should each extend over nine instead of over six months as at present; for what is at present indicated in the statutes, sec. 5 par. 3 (p. 164 of the Calendar), would substitute a course of Practical Pharmacy in the University,

4272-4279 ; as to professional examination, of opinion that the present arrangement, by which the subjects of Chemistry, Botany, and Natural History are examined in at the end of the second year, is an objectionable arrangement, and that those subjects should be got over in the first year at the latest, so as to leave the remaining three years, which are short enough, for the other subjects, 4282-4284 ; suggestion as an alternative, that a student should be allowed to present himself for examination on any subject of his curriculum at the first meeting of examiners after he has completed the required course of instruction in the subject ; further, that he might, at his option, present himself for one of several subjects of examination at one time, 4284-4289 ; would suggest, as to the qualifications for the degree of Doctor of Medicine, that some alteration should be made in regard to position of the Languages and Philosophical subjects that are now required for that degree, 4290 ; nature of alterations suggested, 4291-4295 ; is of opinion that the technical terms in Medicine implying a knowledge of Greek are very insignificant, but that the Greek required before the candidate takes the M.A. degree is of a much higher class, 4296 ; is of opinion that it would be better that the Arts examination for the M.D. degree should take place before commencing professional study at all, 4297-4304, 4306 ; would make the Doctorate of Medicine depend upon the specialty of certain limited subjects worked up to a high degree, 4305 ; proposition that the higher degrees in Medicine should be two in number—a Doctor in Medicine and a Doctor in Surgery ; and that for these higher degrees a very superior examination in Medicine and Surgery respectively should be held, along with the thesis, and would make these two degrees separate altogether, 4306, 4307 ; would allow candidate to take either the degree of M.D. or that of Doctor of Surgery ; the latter would be described as Ch.D. ; a similar distinction obtains in France, the difference there being described as *Docteur en Médecine* and *Docteur en Chirurgie*, 4308-4315 ; were there a lower degree in Arts, such as B.A., would make it compulsory on Medical students to take that degree, 4316-4324 ; of opinion

that a better arrangement than the present Arts preliminary examination would be an equivalent 'leaving examination' at the end of public school course, 4325, 4326 ; alternatively, thinks the same thing could be worked out to a considerable extent by University local examinations, such as those of Edinburgh at present ; is also of opinion, in view of the fact that German and French have in the present day to a great extent taken the place of Latin as a means of scientific intercourse among the medical men of Europe, that these languages should now be insisted upon as an essential part of Medical education, 4327 ; does not think that the examination of a student in Chemistry, Botany, &c., at the end of the first year, would be likely to result in his forgetting them before the end of his course, 4328, 4329 ; does not think that a percentage of marks for work in classes could be advantageously substituted for the written examination at the end of the course for the degree, 4330-4334.

New professorships or lectureships in Faculties.—In Arts Faculty there should be a Professor of Modern Languages, 4336, 4337 ; this would also be available, and is necessary, for the Medical preliminary examination, 4338-4342 ; is further disposed to recommend a professorship in witness' own department of Clinical Medicine, 4343-4349 ; would not, however, make such professorship an exclusive one, but of opinion that, while there should be a sufficient endowment for it, the teaching of Clinical Medicine should be left perfectly open, 4350-4354 ; and would permit the student to take his nine months either in the University or with any teacher recognised outside, 4355-4357 ; of opinion that it would be a great advantage to have lectureships in connection with the Medical Faculty in special subjects, such as eye diseases, diseases of the ear, venereal diseases, insanity, and various other subjects, and thinks that for these a small endowment would be a very desirable thing, and would make attendance on these lectures voluntary, under a consenting arrangement between the professor and the lecturer, that the former would omit the latter's special subject from his general course as far as he could do so, 4358-4368.

Apparatus and assistants in connection with the chairs in Faculty of Medicine.—The want of these is great in the University at present, and there is an absolute necessity for a properly qualified and sufficiently paid staff of assistants, as well as a large additional amount of apparatus, 4369; class museums would also be required to a considerable extent, 4370; witness has at present a class assistant and laboratory assistant for practical teaching in the scientific branches of Morbid Anatomy, Histology with the aid of a microscope, 4371–4376; necessity for an increased grant to defray expenses of properly qualified assistants; for witness assistants the College grants £100, which witness has to supplement by grant from his own funds of £100; considers for each assistant there should be a grant of £200 a year, 4377–4380; in addition to the scientific classes, the practical classes also require apparatus and assistance; for instance, in Clinical Medicine an endowment for a tutor who could instruct students in technical methods of examining patients, and in analysing morbid secretions, is much required; such teaching as he could devote his whole time to could not be overtaken by the professor; great advantage has already accrued from the employment of a clinical tutor, and definition of his uses and duties, 4382–4391.

University buildings and museums.—Present buildings are much cramped for room for laboratories and museums, but if plans of new buildings are carried out there will be ample accommodation, 4381, 4382.

Extra-mural teaching in Medical Faculty.—Thinks that if professors' chairs were sufficiently endowed, teaching should be thrown entirely open to extra-mural competition, except with the restriction that competency of teachers should be ascertained by an examining board; is, however, of opinion that one year's attendance on University classes should be required for a degree as at present, 4392–4397.

Emoluments and retiring allowances of professors.—General impression is that professors in Medical Faculty ought to be endowed to extent of about £400 a year, in which witness concurs, but thinks it would be fair to regulate the amount of endowment according to the probable

amount of fees to be derived from the class, 4398–4405; chairs which may or may not have private practice, besides their professorial income, considered, 4406–4414; alternative proposal of throwing the fees into a common fund considered; might be available under some circumstances, but generally witness does not think it would be acceptable to the professor in receipt of a large income, 4419–4428; in regard to retiring allowances, is of opinion that the minimum of retiring allowances should be £300 or perhaps £400 a year; at present it may be very much less, 4415–4418.

Conditions of tenure of fellowships and scholarships.—Thinks there might be considerable advantage to the University if some of the fellowships and scholarships had duties attached to them; to those, for instance, which carry a salary for several years it might be a condition that the holders should prosecute original research in the laboratories or otherwise in order to get the sum attached to them; further, that others might imply teaching as part of the conditions, and they might hold lectureships or be appointed assistants to professors, 4429–4436; would have others open to allow fellows to go abroad and increase their knowledge in other schools, 4437, 4438.

Financial position and administration of the Universities.—Would like much if there were a reserve fund for promotion of new branches of inquiry, by offering prizes, instituting special lectures, or prosecuting special branches of research, 4439–4442.

Course of University instruction.—Witness has to suggest that it would be well if there were some means of revising the course of University instruction from time to time, to adjust it to the advance of knowledge, and make known the wants of the University in regard to new chairs and courses of instruction; thinks this might be done by the deans of the various Faculties reporting from time to time to the University Council such changes as they might deem necessary, 4443–4447.

SELLAR, PROFESSOR, Edinburgh.—Is Professor of Humanity in the University of Edinburgh, and was appointed in 1863, 6930, 6931; was previously Professor of Greek at St. Andrews from 1859, and had before

then acted as assistant both to the Professor of Greek in St. Andrews and to the late Professor of Humanity in Glasgow, 6982; was a student for four years at Glasgow, and went afterwards to Oxford, 6988.

Course of study for graduation in Arts.—Thinks there should be more freedom, especially in the latter part of the course, by the introduction of certain optional subjects, and by greater encouragement being given to high attainments in some branches of study, by giving candidates the option of omitting certain of the present subjects; has further to propose that, while the ordinary pass for the last examination should be given as at present, there should be an option of taking honours either in one of the three existing subjects, or in one of two others to be substituted for any two subjects, or any single department required at present; is also of opinion that there should be three classes of honours—the first and second to imply distinction, and the third somewhat above the ordinary pass, 6985–6987; with reference to the honours department of Natural Science, has to suggest that the degree of Bachelor of Science should be regarded as equivalent to that of M.A.; considers present preliminary examination for Science degree too elementary, and does not think it would be too much to ask candidates to pass such an examination in Classics as is required for a three years' curriculum, or, as an alternative, an examination in either Logic or Moral Philosophy; would like to see established new departments of study, viz.: 1. History, including the subjects taught in Edinburgh University by the Professor of Political Economy, by the Professor of History and Constitutional Law, and by the Professor of Public Law; 2. Sanskrit and Comparative Philology, 6988–6941; thinks that it is of considerable importance that pass examinations should be held, as far as possible, in October, and would hold the final examination before graduation in April; reasons for this opinion further explained, 6941–6948, 6966, 6967.

Expediency of instituting new degrees in Faculty of Arts.—So far as regards Edinburgh, does not think the reinstitution of B.A. degree is required, or that it would be advisable; there may be more demand for it in

Aberdeen or Glasgow, but witness thinks that giving B.A. degree would tend to lessen number who now go forward to M.A., and who accordingly come up prepared to pass the examination for the three years' curriculum, 6947; proportion of those who so pass to the whole number of students in Arts, also proportion of the whole students who actually take degree of M.A., 6948–6951.

Entrance examinations.—Is inclined to think that the time has come when some change from present junior University classes is necessary; there are two forms which this change might take—either the establishment of an entrance examination, to be passed by all entering the junior classes with a view to graduation, or by leaving the junior classes entirely open, as they are, but not including them as part of the curriculum, to require every one to pass examinations for three years' course before he is regarded as a student qualified for graduation; those exempted on the ground of age wishing to graduate should be required to pass a similar examination in the course of the session, 6952–6963; some statistics of an experimental entrance examination, instituted at St. Andrews between 1854–58, 6973.

Length of University sessions.—Thinks the time of work before Christmas is too short, and would begin teaching, say, in the middle of October, occupying the earlier part of that month with examinations, and continue the teaching somewhat later on in April, 6966, 6967.

Extra-mural teaching in Faculty of Arts.—Judging by witness' own subject, is of opinion that extra-mural teaching would tend, by the competition created, to merely training the student in the exact work in which he is to be examined, and so deteriorate the quality of the present professorial teaching; but co-operation within the University, with better remuneration to assistants, would be preferable to extra-mural teaching, 6968.

Mode of appointment to bursaries.—There are few open bursaries in Edinburgh, but the few there are produce a good competition and an excellent effect on the teaching of our best schools; more open bursaries are much required, and the foundation of new ones perfectly open would have a more powerful effect

than anything else on the higher schools, 6969-6972.

New Faculty.—Thinks a Faculty of Science might be instituted in connection with the development of Science degrees, 6973.

SEWELL, MR. WILLIAM.—Has been schoolmaster of the parish of Eastwood for the last twenty-two years; has attended a University, but is not a graduate, 5880-5882; witness comes to be examined in consequence of a suggestion by the Educational Institute of Scotland, of which witness is a member, and is accompanied by Mr. Smith, the secretary, 5883, 5884.

Entrance examinations.—Believes there should be an entrance examination, and that it should be made an exclusive test of the right to attend the University; but looking to the condition of the schools throughout the country,—elementary and secondary,—it should not be too heavy at first; would propose that entrants should be able to read Latin with tolerable accuracy, translate simple sentences into Latin, and also have a knowledge of the elements of Greek and Mathematics, 5885-5890, 5894-5896; proposal further discussed, 5900, 5910, 5912-5916; witness would not approve of an entrance examination of a somewhat more severe kind being instituted, which any student coming up to the University might pass, and if he did so, go into the senior classes of Latin, Greek, and Mathematics, while those who failed to pass should be sent to the junior classes, 5892, 5893, 5897, 5898; witness thinks that it would be difficult to apply a regulation to the effect that an entrance examination should only be required from students going on to take a degree, 5899, 5900; would not close University to those who merely come to attend special classes as amateur students or private pupils, 5901-5909; of opinion that the schools under the present system cannot produce the same class of students as used to be produced by the parish schoolmasters previous to 1861, or even up to the passing of the Education Act, 5910, 5911; believes that if encouragement were given by School Boards and by the Code the same results could be produced now as in former years, 5917.

Expediency of instituting new

degrees in Faculty of Arts.—Teachers are anxious that there should be a Faculty of Education, both as expedient in itself and as a necessary complement to the chairs of Education which have already been instituted in two of the Universities, and which should also be instituted in Glasgow and Aberdeen, 5918, 5920; number of chairs which should be included in this Faculty, 5919, 5920; makes this proposal with a view to enabling the Universities to confer a degree upon persons who are pursuing education as a science and practical art, so as to suit teachers of the ordinary public schools and schools of higher grade, 5921-5924; would also provide that in the examinations there should be assessors from the body of teachers, 5925; is further of opinion that there ought to be in every parish at least one school where the children of the middle and working classes could obtain an education, at a moderate fee, fitting them for going into professional life, if they liked to take it, 5926; this schoolmasters' degree should for the higher class public schools represent an amount of attainment in scholarship as high as that of the M.A. degree; for the ordinary public schools something less should be required, 5927; proposals as to means of testing the teacher's power of teaching in giving him this degree, 5930, 5931.

Length of University sessions.—Would suggest that, if possible, there should be evening classes in connection with the Universities, attendance on which would qualify for a degree, to be taught by the professors or by the assistant professors, 5932-5937; thinks it would be of importance if there were short summer sessions, with a course of lectures qualifying for a degree, 5938-5941; thinks arrangements might be made embracing the school vacation as a part of the period, by which schoolmasters might take advantage of such summer courses, 5944-5948; to avoid difficulty as to counting time of summer sessions, has to suggest that if the winter session counted two terms the summer might count one, 5942, 5943.

Extra-mural teaching in Faculty of Arts.—Considers it would be advantageous if extra-mural teachers, licensed by the Universities, were recognised in subjects qualifying for



a degree; and if these were resident in various towns, to which school-masters could come, the latter might qualify themselves to pass the examination by attendance in or near their locality, 5949-5954; further, thinks that, with the prescribed attendance on extra-mural lecturers, two years' attendance on the University, instead of four, might be sufficient for the M.A. degree, 5953.

Mode of appointment to bursaries.—Thinks that bursaries should be obtained as far as possible by competition, and that presentation bursars should pass a general bursary examination, 5955, 5956; difficulty of enforcing latter proposal discussed, 5957-5965; in connection with this subject, it would be very valuable if in Scotland small local bursaries were attached to schools, to enable the children of poor parents to pursue their education further in the same school; witness can instance cases where a £5 bursary has kept a boy at school for two or three years, and enabled him to go off to the University direct from the parish and other schools; but witness would strongly deprecate the creation of bursaries to promote bursars from the parish to a secondary school, 5966-5972.

SHAIRP, PRINCIPAL.—Is Principal of the United College of St. Salvator and St. Leonard, in the University of St. Andrews; was appointed in 1868; before that was Professor of Humanity in the same College from the beginning of 1861, 1013-1017.

Constitution and powers of the University Court.—University Court of St. Andrews consists of six members; witness is not a member, 1018, 1019; thinks it would be well that the General Council should have one more member in the University Court, 1020, 1021; also thinks it would be desirable that the Principal of the United College should be a member of the Court; witness means the holder of the office for the time, and irrespective of himself, 1022; would desire that the Court should meet a little more frequently, which, perhaps, might be accomplished by an addition to the number being made, 1026, 1027.

Constitution of Senatus described, 1028-1025.

Functions of General Council.—Does not see any great call for alter-

ing their functions, either by giving them the power of adjournment or by increasing their powers, 1028-1032.

Course of study and regulations for graduation in Faculties.—Thinks the present course of study in Arts is too rigid, and that it attempts to cover too much ground; is favourable to specializing the subjects for degree, allowing eminence in one branch to count, instead of comparative mediocrity in three great branches; but would make it an imperative condition that a preliminary basis of disciplinary study should be insisted on, and that every candidate, before being allowed to pass into specialties, should be obliged to pass an examination in a certain amount of Language, Mathematics, and elements of Logic; no Metaphysics nor Psychology, but the elements of common Logic, 1033; if students did not pass their examination till the end of their first year, they should certainly attend the classes in the above named subjects, 1034; in speaking of Language, witness would certainly have Latin and Greek, and as there are Hebrew chairs, would also add Hebrew; not for the common pass, however, but for honours in the Language department, and thinks it would be desirable in some cases to interchange it with Modern Languages; witness has lately been giving attention to the Oxford examination studies; thinks that in Scottish Universities, after securing a preliminary basis, students might specialize and bifurcate or trifurcate into something like the following:—(1) Language, (2) Mathematics, (3) Mental and Moral Philosophy, (4) Physical and Natural Sciences, and (5) History; with reference to the latter, the want of History seems the greatest defect in all Scotch education, both in Universities and schools, 1035; merits and practicability of this proposal discussed, 1036-1052; thinks that the Ordinances, as they at present stand, cast the curriculum a little too loose, leaving too much in the option of the students as to the rotation in which they take their classes, and suggestion for rectifying this defect, 1053.

Expediency of introducing an entrance examination.—Thinks, on the whole, it would be desirable; when witness first went to St. Andrews

there was a very moderate entrance examination then in existence there, but as it was found to frighten the students away, and other Universities did not have it, it was dropped, 1054-1056; is aware that there is a bursary examination at Aberdeen, and that it has acted in a very good way, 1057-1059; with reference to witness' remarks as to an entrance examination, has to add, that if a lad above sixteen or seventeen was plucked, he should have another opportunity about the middle of the session of trying again, when if he passed, the session should count for him; every one below sixteen who failed to pass should be sent back to school, 1060-1064; a Science degree has lately been instituted at St. Andrews, very much upon the same plan as the degree in Edinburgh; it has never yet come into play, this being the first year of its appearance in the Calendar, 1065.

Extra-mural teaching.—Have never had anything at St. Andrews in the shape of extra-mural teaching; proposal to institute a school of Science in Dundee in connection with St. Andrews University; a history of the whole movement, drawn up by witness, and read by him, with relative pamphlet and reports, handed in, 1069; assuming a separate Faculty of Science were established in Dundee, further opinions of witness as to matriculation, curriculum, and status of students in St. Andrews University, discussed, 1070-1104.

Length of University sessions.—Is a point for consideration, whether the session should not commence in beginning of October, go on till Christmas, then, leaving the month of January free, start again in beginning of February, and go on till end of May; is decidedly of opinion that a summer session, or an extended session of nine months, would be undesirable, 1105-1107.

Mode of presenting and electing University officers.—Rector is appointed by an open poll of students, 1108; with respect to appointment of professors, there are three chairs in St. Andrews in the patronage of private patrons; witness gave strong evidence on this matter before the Endowed Schools Commission, and wishes to repeat all then said with increased emphasis, and has

seen serious evils arising in the University from that cause, 1109; as a remedy, would deprive the patrons of the patronage, and give them compensation if they claimed it, 1110-1112.

New chairs or lectureships.—The necessity for these is contingent upon the success of the Dundee scheme; wishes the Commission would take away the name 'Civil History' from the Natural History chair, leaving the latter, the subject of the lectures, as the title, 1113-1116.

Emoluments and retiring allowances of professors.—Emoluments of professors in St. Andrews are inadequate, and are considerably below what they were estimated at by the late Commission; in proof of this, return made to the Treasury at Christmas 1875, showing estimated and actual amount received by the several chairs upon an average of the preceding three years, 1117; causes of diminution of income largely attributable to claims made upon University with respect to tithes by the Crown Receiver for the Woods and Forests, 1118; the decrease of some professors' emoluments is owing to the decrease of students, 1128; the principals, too, find their incomes inadequate; witness has several times applied to the Treasury for a house, or in lieu, rent for a house, and he is the only principal in Scotland without a residence; the Treasury have referred witness' application to this Commission, 1119; the Principal of St. Mary's College has a house, 1120, 1121; witness' income, as returned for three years, was £550, and has not decreased, 1122-1127.

Double principalship in the University of St. Andrews.—Witness cannot say that he thinks it advantageous to have the double principalship; there should only be one, having supreme superintendence of both Colleges; would leave the Divinity professor *primarius* with all the emoluments, house, and everything else; and further, arranging that if witness should leave or die before Principal Tulloch, the latter should have the office, but that after he is gone it should lapse to the Principal of the United College, 1129-1134; witness is of opinion that the minimum salary a professor should receive

ought to be at least £600, 1135-1137.

Retiring allowances of professors.—The system is at present almost inoperative, a man having to wait thirty years before he gets the full amount, and two-thirds is so small an amount that University Courts shrink from suggesting that a professor should retire, either from inefficiency or deficiency; if the retiring allowance could be got sooner, and if it could be raised somewhat above two-thirds, the men would be more willing to take advantage of it, 1138-1141.

Bursaries.—Of the St. Andrews bursaries, the Calendar says there are eighty-one bursaries, varying in value from £5 to £50; of these, four or five are annually in the hands of the United College, and a few in the hands of the University; these are disposed of by competition; although witness does not consider private patronage to bursaries so objectionable as private patronage to chairs, thinks it would be a good thing if they also were transferred to the University; has to ask the opinion of the Commission on a point of difficulty which has arisen in regard to the Ramsay bursary; the College interpret Ordinance 10 of last Commission to mean, that the holder of this bursary must take his degree, and the College have always withheld the last year's payment until the holder graduated, in some cases giving him a year or two to do so; to this the present Sir Alexander Ramsay has demurred, and wishes the student to get the bursary without graduation, 1142-1147.

University buildings.—There is urgent need for an additional building for the use of the library; it would take from £8000 to £10,000 to do the thing as it ought to be done; hopes that Government will make some grant, at one time they were willing to give one half, 1148, 1149; there is a well-furnished museum, but the specimens belong partly to a society in St. Andrews and partly to the University, 1150; the buildings are kept up by Government, 1151.

Entrance examinations.—Were an entrance examination adopted, witness would have simply a passage of Virgil or Horace, or even go as low as Cæsar, but would require accurate translation and knowledge of gram-

mar; perhaps also a simple piece of English and Latin; in Greek, such a book as the *Anabasis* of Xenophon; and in Mathematics say the first two books of Euclid; this for a beginning, and as the secondary schools improve, it might be heightened; the primary schools are at present in a transition state, and secondary education is, at least according to the experience of the Fife and Kinross teachers, going to the wall, and the getting of the children up to the standards is now their whole aim, and occupies all their time, 1152-1157; as an examining body, would have a board at each University, with representatives from all the four Universities on the examining board, 1158-1163.

Apparatus and assistance.—Of sums paid from the general fund of the University for apparatus and other class purposes, witness furnishes a detailed note, showing an expenditure of £343 in the year 1875-76, 1163, 1164.

SIMPSON, PROFESSOR, Edinburgh.—Is Professor of Midwifery and Diseases of Women and Children in the University of Edinburgh; was appointed in 1870, 7854, 7855.

Course of study.—Thinks Medical students should be induced to pursue an Arts course before beginning the Medical; in order to this, would modify Arts degree examination, so as to include some of the Natural Sciences as alternative with some of the subjects now required, 7858-7867; think this would induce many to go in for M.A.; it would diminish the pressure of study for the Medical degree, and give greater scope for the Medical curriculum proper, 7861-7864; present requirements of the Arts degree are too high in directions that give no special training for Medical work, 7871; but one of the Classical Languages, Mathematics, Natural Philosophy, and one of the other philosophies or sciences should be retained, 7864; Greek desirable, but not indispensable, 7866; would not put this course in place of the present entrance examination, 7869, 7870; for students who have not graduated, and who enter under present conditions, provision should be made for passing in Botany, Chemistry, and Natural History, before the second winter session; they should be allowed to pass in whatever sub-

jects they have finished before beginning a new session; reasons for this, 7872-7875; candidates pay £5, 5s. more for the C.M. diploma than for the M.B. only, but the examination is the same; should be a distinct examination for the C.M. degree, which is required for public appointments, 7876-7880; desirable to have an authorized order of taking the classes; all should pass in Science before beginning Medicine; a dispensation would be given to those partly taught at other institutions, 7880-7888.

New professorships.—No new chair at present, but desirable to have a lecturer on Insanity, or Professor of Practice of Medicine might give it as a special course; reasons, 7890-7893; Clinical teaching is now competent to any professor, but should always be attached to chairs of the Practice of Medicine, Pathology, Materia Medica, and Midwifery and Diseases of Children; two of these should be in infirmary at one time, dividing the clinical students between them; Professor of Midwifery should have one of these sections of students in his ward once a week, 7893-7897; there is no direct University provision for clinical teaching of Midwifery; after the infirmary ward for this purpose was closed, the Lying-in Hospital was started; the University Professor of Midwifery was ordinary physician and director, now he is *ex officio* only one of four, and can teach clinically only three months in the year, 7897-7901; the University ought to secure an interest in the direction of this institution as in the infirmary, where its professors teach clinically all the year, 7901, 7902; doubtful whether Lying-in Hospital will be connected with infirmary when the new buildings are occupied; not customary or desirable to have a lying-in ward in a general hospital; Professor of Midwifery in foreign schools is generally director of the lying-in institution, 7903-7906; Edinburgh Maternity Institution is small and poor; £5889 are in hand towards a new one; should be at least £10,000; University might help, and Government make a grant, with the proviso that the University Professor of Midwifery should have a ward, 7906-7913.

Length of sessions.—Present arrangement good, 7913, 7914.

Recognition of extra-mural teach-

ing.—Classes of extra-mural lecturers are in name, in subjects, and usually in time, same as University, 7888; witness approves of present Edinburgh system, recognising this teaching, if students show they have paid the same fees as those of corresponding University classes; thinks the other Universities should maintain the same condition, 7915-7917; Edinburgh fee is £4, 4s.; extra-mural lecturers teach students for a college diploma at £3, 5s., along with the £4, 4s. University men; a student graduating at Glasgow is required only to have paid as much as Glasgow fee—£3, 5s.; there should be an inter-University arrangement on this point, 7917-7932.

Emoluments of professors.—The most clamant case is that of examiners in Clinical Medicine, now doing gratuitous work, and the hardest we have; the University Act provided each professor £100 a-year for examining in his own department; but nothing was provided for the additional work which falls upon those who have to examine clinically; they should have a special fee in respect of this, 7932-7941; with regard to the requirements of his own chair, witness refers and adheres to his returns to the Duke of Devonshire's Commission, 7941-7944.

University buildings.—Crying evil that the Edinburgh buildings have no convenience whatever for ordinary decency; not aware that any representation has been made to the University authorities, 7945-7948.

SMALL, JOHN, M.A.—Is Chief Librarian in Edinburgh University; appointed assistant in 1847, and chief in 1854, 5771, 5772.

Condition of libraries.—Staff consists of four assistants and boy, 5773, 5774; two departments, the borrowing and the reading-room, which accommodates 160 at a time, and is full during session; funds are set apart yearly to supply it with books for consultation, duplicates and triplicates requiring to be often replaced, lexicons worn almost to shreds, 5775-5781; restrictions and alleged grievances about the use of books not in the reading-room, 5781-5784, 5789-5794; always one assistant in the reading-room; no student allowed to help himself to books, 5785-5789; in the borrowing department numbers al-

lowed are fixed by Ordinance—professors, 25 vols. at a time; assistants, 10; members of General Council and Masters of Arts under age, 4; students, 2, 5797; University subscribes £52, 10s. to Messrs. Edmonston & Douglas to lend new books, chiefly of biography and travel, no novels, 5797-5803; grievance to supply 4 vols. to Masters of Arts under age, 5803-5807; books are not sent out as a rule; may be taken far out of town; members of Council may retain them fourteen days during session, and a month in summer, 5807-5810; committee have fully considered whether different Universities might have a common interest in the libraries, but disappointed; reasons, 5810, 5811; fund for the purchase of books is £800 yearly, minus subscription to Edmonston & Douglas; sources of this fund, 5812, 5813; relief from the Treasury amounting to £500 for the buildings, then £100 was voted for the reading-room books, 5814-5821; the £800 a year purchases about one-half of the new books offered for inspection; binding costs about £150 more; salaries £670; cost of cleaning, heating, lighting, printing, not charged against library, 5821-5831; more assistants would be wanted if there were more books, 5831, 5832; books are borrowed by about 100 members of Council, more for study than entertainment; many are clergymen and doctors, 5833-5839; a little more money desirable for salaries, and purchase and accommodation of books; the wall space quite exhausted, but a convenient addition can be had when the Chemistry department is removed, 5839-5849; to select books for purchase, a circular is sent fortnightly to each professor requesting his suggestions; books are offered for purchase chiefly by Williams & Norgate, and M'Lachlan & Stewart; regulation of prices, 5849-5858; many persons who have no right are allowed to consult books; College of Surgeons have peculiar privilege, but use it little, 5858-5866; library is extensively, and on the whole properly used, 5866-5870; dictionaries, books of reference in general, mss., large atlases, rare books, and books of engravings are seldom lent out, 5870-5874; suggests that Parliamentary grants should be re-arranged, the allowance to Edinburgh being comparatively small in proportion to the

constituency, 5874-5877; catalogue is in ms., saved as much as possible; readers are expected to know what they want; in reading-room there is a bound volume containing lists of additions during the last twelve years, 5877-5880.

SMITH, REV. THOMAS, D.D., Edinburgh.

—Is minister of Cowgatehead Free Church, Edinburgh; was educated at Edinburgh University; was last of the honorary Masters of Arts; is also D.D. of same University, 9636-9639.

Entrance examinations.—Is strongly in favour of them; ought to be made absolutely compulsory upon all entrants into Arts classes; could not be done for two or three years; but it might be intimated now that they would then be begun with stringency, 9639-9644, 9650; objection to the present system is that the standard of teaching is kept down, 9644; entrant should be able to pass in Livy and the Anabasis of Xenophon, should know a little Geometry, be good arithmetician, know English History, and write English with ease and accuracy, 9645, 9646; would make no exception in favour of the older entrants, or relax because of the paucity of secondary schools throughout the country; if Universities make their demand, people will find means of complying, 9647-9651.

Course of study.—Would raise the standard very much in Latin and Greek; understands that now a man who has scarcely seen a Greek play may pass for a degree; he can get enough marks by taking only the easiest questions in examination papers, 9651, 9652.

Length of sessions.—Thinks sessions ought to be much longer; three terms of three months each, two of these to count same as present five months' session; Arts curriculum thus got through in three years—nine terms; present length of session requires four years; in three, as at present, the teaching would be insufficient or the student's strength overtaxed, 9653-9658; boy who goes two years to the rector's class in the High School gets no higher reading at the University, 9658-9662; many Free Church students examined by witness after finishing curriculum will never be able to profit by read-

ing a Latin book; men without preliminary training never go forward, 9662, 9663; the admission of other than University students to D.D. has worked well, but is yet imperfect; almost impossible to pass the examination in Biblical Criticism creditably without attending that professor's class; and so long as the examination is practically in the hands of the professors on their own subjects, others think it vain to go up; other professors ought to be alongside; no blame to the professor, he examines as he teaches, 9664-9670; further details on the lengthening of sessions and arrangements of fees; if we had the year occupied, students of higher class would attend, instead of going to Oxford and Cambridge, 9671-9677.

New professors.—Faculty of Theology much too weakly manned; Free Church College has twice as many professors; might be arrangements for all Presbyterian Churches to teach many branches of Theology in common; Free Church has one professor giving two hours daily to Theology alone, another has Natural Theology, another Apologetics; whereas University Professor of Theology, with only two hours a day, has to combine all; it is both too much for professor and inconvenient for students, 9678-9689.

SOMERS, MR. ROBERT, Collesie.—Is schoolmaster of the parish of Collesie; attends here as a representative of the old parochial schoolmasters, 6226, 6227.

Entrance examinations.—Approves of the principle, but would not insist upon these till secondary education in primary schools is more satisfactory; formerly 58 per cent. of students at Scottish Universities came from parochial and other elementary schools; number has decreased since the Act of 1872, 6227-6231; has ascertained that in twelve different presbyteries, 76 went direct from parish school to University during the eight years immediately preceding 1872; after the Act, only eight from the same districts, 6231-6235; 989 schools out of 2329 teach none of the higher subjects; in 1336 schools, only 1.846 per cent. learn Mathematics, and 3.867 Latin; the Educational Code promises 4s. for easily taught subjects, which can be

got up in a short period; the same is given for Latin and Mathematics, which cannot be got up under a year, 6235-6238; entrance examination would exclude a poor but deserving class coming from parish schools; gives examples, 6238-6244; these lads, inferiorly prepared, might make up their way during College study, 6244; has been schoolmaster at Collesie sixteen years; it is rural, and was parochial before 1872; has sent only one boy to University; at Logie had many that went to secondary school, then to University, 6244-6255; if better provision were made in schools, entrance examination should require pretty good knowledge of Virgil and Horace, a little Greek, and four books of Euclid; would be difficult to do more in school; most that is done is out of school hours, 6255-6259; might go higher than the above standard; considers it the minimum, 6259-6264; prefers keeping a clever boy and sending him direct to the University rather than to secondary school, 6265-6268; the average age to leave witness' school is thirteen or fourteen; small bursaries might induce clever lads to remain two or three years longer; some bonus to the master for every scholar prepared for University would be beneficial; bursary examination might be held at a University seat, 6268-6285; strong feeling among schoolmasters to keep up the old system, teaching Latin, Greek, Mathematics; under the Act of 1861, Universities had control over the standard of qualification for schoolmasters; now they must have certificate of competency, not including much Latin or Mathematics, 6285-6292; thinks the standard lower than twenty years ago; the small amount that can be earned under the new Code is not appreciable, 6292-6298; does not think raising the standard would diminish attention to lower branches; statistics to prove this, 6298-6304; there is a marked declension in the higher branches; witness attributes it to the operation of the Code, 6304-6308; thinks secondary schools would be beneficial, but not meet the case of the rural districts; bursaries would be excellent, but there seems no source for them but private liberality, 6308-6313; witness' average number of boys was 83; one pupil teacher, 6313-6316.

**New Faculties.**—Teachers represented by witness think there should be a Faculty of Education in Universities; that Universities should frame curriculum for teachers, and give degrees; such degree to be imperative on schoolmasters not within reach of secondary school; still better if they took M.A., 6319-6331.

**SPENCE, PROFESSOR, Edinburgh.**—Is Professor of Surgery in the Edinburgh University; appointed in 1864; in practice and teaching nearly forty years previously; lectured on Anatomy and Surgery in College of Surgeons, 5973-5979.

**Course of study in Medicine.**—Difficulties arise from amount of work required to be overtaken in four years, 5979; practical teaching has increased in almost all departments, and is likely to go on increasing, 5980, 5981; one remedy, an extension of curriculum to five years; another, to relegate all purely scientific subjects to a preliminary period, and test the student by an entrance examination before admission as Medical student proper, 5982, 5983; present preliminary examination is merely to judge of the general culture; would substitute Elementary Physics for Mechanics; thinks it would be good for student to take M.A. before beginning Medicine proper; it would diminish the number, but improve the quality of students; does not think it should be imperative, 5984-5992; if four years' course be continued, student should attend Botany and Natural History in the summer, immediately after finishing Arts studies; if he is to take M.D., he should have Botany; if he obtained a Science degree before beginning Medical study, that should free him from further examination in the subjects included in the Science examination; same with all others in the curriculum, 5992-5995; most practical studies must be taken every day; witness has a daily bandaging class, because he cannot let students meddle with every hospital patient, 5995-5998; if period of study cannot be lengthened, no new science should be introduced as imperative; Elementary Physics should be preliminary; in first winter session, student should attend Anatomy and Chemistry only with their practical classes, 5998-6004; the order in which work is to be taken should be rendered almost im-

perative, but one University can hardly do it without excluding students from other schools; witness has refused students coming to take Surgery in first year, 6004-6011; Clinical teaching includes hospital attendance and clinical instruction; fallacious to exalt hospital teaching above lectures; professor cannot pause in an operation on the living subject to explain; Surgical lectures are demonstrative, 6011; demonstration is performed on dead subjects, living models, and by figures; on clinical instruction witness refers to *Report of the Committee on Professional Education*, 1869, prepared for General Medical Council; two hours a day are enough for student to spend in hospital, more will confuse him; subdivision of clinical class is important; a man standing a few paces off cannot see the points of the case, but it cannot be helped that students come and rush after any specially interesting case; the remedy would be a system of distribution; details and reasons; difficulty about oral examinations; men fear being laughed at if they offer themselves; professor cannot always explain a case in presence of a patient, 6012; various modes and difficulties of clinical teaching; Professor Syme's method; patients brought into the theatre; Clinical Medicine cannot be taught in the lecture room; patients have to be considered, and no liberties taken with them, 6014; does not approve of a separate professorship of Clinical Medicine, and the reasons; students would be restricted to the opinions of one man instead of hearing several; Clinical teaching should be obligatory on three chairs—Practice of Physic, Pathology, and Therapeutics, the professor of which, if there is to be a separate chair, should have clinical opportunities; advantageous if all these three teach at once and divide the students, 6015; Professor of Midwifery should teach clinically; describes arrangements in the infirmary for clinical teaching; the extra-academical school in Edinburgh has three lecturers on the Practice of Physic; two of them lecture on Clinical Medicine, 6017, 6018; rights and reservations connected with clinical teaching, 6019; does not think Medical Jurisprudence requires it so much as Therapeutics, 6022; professorship of Clinical Medicine in Glasgow is merely nominal; arrangements of Italian and

German Universities, 6024; disapproves of a separate professorship of Clinical Surgery; remarks on the relations of Anatomy to Medicine and Surgery, 6025; would introduce both Medical and Surgical Anatomy into the final examination; suggests also that a student should not be allowed to attend one class while he is preparing for examination in another, 6026-6029; Surgical examinations should be conducted by a board of four professors, to save the student from being examined over and over in the same thing; such a board would give more distinctive character to the degree of C.M., 6029; alteration not desirable in the mode of conducting examinations generally, 6030; examining work is disagreeable and laborious; ought to be better paid; the teachers should be examiners along with others, 6031, 6032.

New professorships and lecture-ships.—Thinks there are enough; reasons for disapproving of lecture-ships; thinks lectures on special subjects are best left to private enterprise; if there is a demand there will be a supply, 6037-6040.

Assistance and apparatus.—Assistants should be provided for professors when there is so much practical teaching, 6039; apparatus should be provided for some classes; no individual teacher can afford what is necessary for Physiology, 6040; material and apparatus should be furnished for examinations; the expense should not fall on the examiner, 6041, 6042.

Extra-mural teaching.—The system of extra-mural teaching has been working well; the benefit to the student overbalances the injury to the professor; it is a hardship that no extra-academical student can attend him without paying a matriculation fee of £1 besides University fee of £4, 4s.; it cannot be helped, 6043-6047; extra-mural teaching is a healthy stimulus, and gives students choice of teachers, 6047.

STEPHEN, REV. ROBERT, M.A., Aberdeen.

—Is minister of Renfrew, M.A. of Aberdeen University, and for the last eight years convener of a committee appointed by the Council to consider any changes desirable, 6419-6422.

Constitution and powers of University Court.—Court should include nine—Rector, Principal, Chancellor's

assessor, Rector's assessor, two assessors from Senatus, three from General Council, 6423; nine members are none too many, 6426-6434; the three assessors from Council should not all retire at one time, but two every second year, 6434-6441; the clerical profession is largely represented, but that is overborne by Medical graduates in England, 6444; there is sometimes a display of party feeling at elections, chiefly about University reform, 6445-6448; suggests that when any representation is made by Council to Court, deliverance of Court be returned a month before next Council meeting, instead of not till Council meets, 6448-6451; that the Court shall have power to improve internal arrangements, submitting them for the opinion of General Council before finally adopting, but that the Council have no veto, 6451-6457; that the application of any gift or endowment may be changed after fifty years by the Court, with concurrence of General Council, Privy Council, and the donor or patron, 6456-6460; Court complains of limited powers for enacting rules as to the course of study, manner of examination, and conditions of granting degrees; finds it difficult to alter Ordinances that affect all the Universities, and very difficult to get others to agree, 6460-6466; the Council has approved that the Chancellor be elected for eight years only; that the voting for Rector be by numbers, not by nations; casting vote to be with last Rector or Chancellor, 6465-6470; the Council also carried that meetings of Court should be open, except in cases of discipline; witness thinks this would prevent freedom of discussion in appointing professors, 6469-6472; thinks unnecessary another proposal of Council, that it should have power to meet at intermediate times on emergency, 6472-6475; desirable to remove a doubt as to the power of Council to appoint committees; it has been doing so, and of such committee witness is convener, 6475-6482; desirable that Council should have means of communicating with other Universities on what concerns them, 6482-6486; also that sanction of Privy Council shall not be necessary, except when general Ordinances or pecuniary interests are affected, 6475-6486.

Entrance examinations.—Desirable to have entrance examinations; diffi-



culty is secondary education so low; necessity not so much felt at Aberdeen, because five-sixths of students compete for bursaries; standard would need to be pretty uniform, or Universities might underbid each other; professors should not be entrance examiners; it is their interest not to reject a student, 6486-6493; desirable to make some modification in the M.A. degree, by allowing certain options; also that there should be a new degree, attainable in three years, or two if summer sessions are taken, 6493-6501; Medical students and school teachers might be thus induced to attend Arts classes, 6501; danger is that some might rest satisfied with B.A., who, as things are, would go on for M.A., 6502; object might be gained by certificate instead of degree, 6503-6507; would not make B.A.'s members of Council; would not require student to take B.A. on his way to M.A., 6507-6510; if University would grant certificates to teachers who send up distinguished students they would be valued, 6507-6511.

New professorships.—Aberdeen requires a chair of English Literature; Medical Faculty want Pathology; French and German teachers should be licensed; Natural History should be broken up; Geology and Astronomy can now be but slightly taught, 6511, 6512.

Length of session.—Very anxious for summer sessions, to shorten the curriculum; assistants might relieve professors in summer; three winters and three summers equivalent to four winters, 6513-6516; reasons, 6516; if summer sessions, better make a greater break at Christmas; present break too short, 6517-6522.

Bursaries, etc.—Fellowships would be very beneficial, competed for at graduation; fellows might lecture on some subjects, or help with summer classes, 6522, 6523; there are no funds for such, but great wealth of bursaries, 6524-6528; private benevolence the only hope, 6528, 6529; most of the bursaries are competitive; presentations beneficial, with a good standard examination; Aberdeen has both, 6530-6540.

Buildings.—Desirable to have a residence to accommodate fifty, and charge only cost of living, 6540-6545; even a dining hall desirable; many live so poorly that health breaks

down, 6545-6549; most live in private lodgings, without University control, 6549-6553; in 1870 circulars were issued over the North of Scotland to excite interest in this, but without result, 6554.

STEWART, PROFESSOR GRAINGER, Edinburgh.—Is Professor of the Practice of Physic in Edinburgh University; appointed in 1876; previously lecturer in extra-academical school three years on same subject, seven years on Clinical Medicine, 8430-8434.

Course of study.—Desirable to gain more time for practical subjects by extending the course to five years; or better, improving examination arrangements, 8434, 8435; well if students could be examined after each course or two courses, 8437; would permit, not compel, Botany and Natural History to be preliminary; reasons, 8439-8442; order of study and examination, 8442.

New professorships.—Thinks there ought to be professorship or lectureship on Insanity; would not occupy a man fully; three lectures a week in summer sufficient; would make attendance obligatory; reasons, 8443-8453; chair of Ophthalmology is required, 8453-8457; thinks it would be a mistake to appoint a special Professor of Clinical Medicine; teaching better divided as at present, 8457, 8458; reasons, 8459, 8460; would make it obligatory on Professors of the Practice of Physic, Pathology, Materia Medica, and Midwifery and Diseases of Women, to teach clinically, 8461-8464; would always have two professors on duty; class divided between them; make them change in the middle of winter; important for students to see various practice, 8461-8465; valuable arrangement now is a clinical tutor acting under clinical professors, and appointed by them jointly, 8465-8473; difficulties about Midwifery; Maternity Hospital should be connected with University, 8473-8476.

Length of sessions.—Would be advantageous to have two sessions of four months each, giving some courses two sessions; beginning sessions in November and April, and leaving March for examinations, 8476-8484.

Extra-mural teaching.—Approves of the recognition of extra-mural teaching, and generally of the mode, 8484-8488; thinks it advisable to extend it to Arts Faculty, perhaps all

the others, but not till chairs are adequately endowed; advantages of the plan; does not think it would lead to cramming, 8489-8495.

Electing officers.—Thinks the Curatorial Court should be enlarged, perhaps to fifteen; give Town Council at least eight, Court the rest; Senate should not be represented; reasons, 8495-8501; better not to allow voting by letter, but if so, provide that a certain time pass between the last day for applications and the appointment, 8501-8505; considers the Curatorial Court better as patrons than University Court, 8505.

Emoluments of professors.—Emoluments of Arts professors ought to be increased; allowances should be made for examinations in all the Faculties; Clinical examinations involve an immense amount of additional work, 8506; endowment better than raising fees, 8507.

STEWART, REV. PROFESSOR, D.D., Glasgow.—Is Professor of Biblical Criticism in Glasgow University; appointed in 1873; and recently clerk to the Senate, 11,798-11,801.

Course of study.—Has tabulated all the Arts students, numbering 3835, from 1861 to 1874-75, indicating the classes taken by each; 605 completed the course; of these, 383 graduated, 222 not; explanation at length of these statistics; suggests that some elasticity in the M.A. course should be allowed; that there be five departments instead of three, History and English Literature being one; would revive the B.A. degree; eight classes to be attended, including at least three out of the five departments of the M.A. course; full explanations of statistical tables, 11,801.

Entrance examinations.—University ought not to compete with schools as it does; cheaper to send a boy to College than to keep him at school, 11,802; would propose that none under the age of sixteen should be admitted to the Arts curriculum unless he passes in two out of three subjects, Latin, Greek, and Mathematics; those above sixteen who fail to pass should be admitted to the junior classes, but receive no ticket conferring University status; special provision to be made for those above nineteen, 11,803.

New professorships.—Would have

a chair for History, not a mere lectureship, 11,807, 11,808.

Assistants to professors.—Assistants to professors of Latin, Greek, and Mathematics ought to have a better position; might be styled assistant professors; their appointment to lie with the Court, not the professor; they ought to have a proportion of the fees, perhaps a fifth; facts and reasons, 11,811-11,818.

Length of session.—So far as the Arts course is concerned, should say no change; statistics to show that the long vacation is used to good purpose, 11,818.

Extra-mural teaching.—Thinks extra-mural teaching should not be recognised in Arts Faculty; statistics and explanations showing that professors do not coach for the degree; extra-mural teachers probably would; professor would do the same in self-defence; the professorial system would be superseded by the tutorial, 11,819; thinks the standard for Arts degree is sufficiently high; would not introduce severe entrance examination, unless secondary education were better provided for, 11,824-11,828.

Election of officers.—In regard to the election of Chancellor, the Ordinance presents the possibility of grave abuse; it should not be left in the hands of the Council Registrar to open all the voting letters; he could make a majority on whatever side he chose, 11,828, 11,829.

Emoluments of professors.—Chair of Biblical Criticism is endowed with one-sixth of the deanery revenues, which are liable to constant diminution through augmentation of stipends; knows no remedy, but feels it less than formerly, because of addition from the Black Bequest, 11,830-11,833.

Bursaries.—Many bursaries fall vacant before the expiration of the period; would be advantageous if lapsed bursaries could be used for the benefit of men in the second half of their course, 11,833-11,838.

Thinks Divinity chairs might have been open to members of other Presbyterian Churches, had they not opened Divinity halls of their own, 11,840; thinks the Church ought to demand that Theological students should take the degree of M.A. before entering the Divinity Hall, 11,841, 11,842.

STRUTHERS, PROFESSOR, Aberdeen.—Is Professor of Anatomy in Aberdeen University; appointed in 1863; an M.D. of Edinburgh, educated there, 7777-7782.

Constitution of University Court.—Considers the number of members too small; General Council should have a second assessor, and the Crown should appoint a gentleman of high legal position; the assessor sent by the Senatus should not be a member of Senate; reasons; powers of Court are great, but witness would not curtail them; neither would he desire that University should be able to alter an Ordinance without sanction of Privy Council, 7784; would not trust direct power to General Council; it is useful chiefly as a talking body, bringing up abuses or grievances, and making suggestions; would not give it a veto on enactments of Court; would not allow its powers to be delegated to committees; once a year is enough for it to meet, 7794; suggests that every student, at the time of graduation, should be obliged to register himself in the list of General Council; probably a fourth do not register; cost is £1, which Universities can scarcely afford to dispense with; the produce is about £79 a year; registration comes in waves before an election, 7794-7802.

Course of study in Medicine.—Regards the union of the two Colleges as most beneficial; shows a statistical table, from which it appears that there has been no increase in the number of Arts students for thirteen or fourteen years; those of Divinity have greatly diminished; those of Medicine steadily increased; considers the preliminary examination very good; would not transfer Natural Philosophy from preliminary to professional examination; would substitute elements of Physics for elements of Mechanics in preliminary examination, 7802-7804; some changes necessary in professional examinations, same as those already accomplished in Edinburgh and Glasgow; details; students should not be hurried through Anatomy; prefers the Glasgow method of examination in Anatomy, after three summer and two winter sessions; in Regional Anatomy, after three winters; the whole arrangement

being: *first*, or *preliminary examination*, Botany, Natural History, Chemistry; *second*, Anatomy, Physiology; *third*, Regional Anatomy, Materia Medica, Pathology; *fourth*, Surgery and Clinical Surgery, Practical Medicine and Clinical Medicine, Midwifery, Medical Jurisprudence; thinks candidate who fails in some subjects should not be re-examined in those in which he has succeeded; would rather diminish than extend compulsory part of Medical curriculum, but a course of Pathology is needed; would substitute the word 'meetings' for 'lectures,' that teacher may adopt a more practical method; for M.D., would allow a modern language instead of Greek; and that the thesis should be for M.D. instead of M.B., 7804.

Extra-mural teaching.—After requiring two years' University attendance, one of them in Aberdeen, it should be left to Court to recognise or not the schools attended other two years; this means not to restrict recognition of extra-mural teachers, 7804; Aberdeen has no extra-mural lecturers undertaking any of the indispensable courses, 7805-7808; Edinburgh extra-mural school exists for Colleges of Physicians and Surgeons; lectured there for seventeen years; Andersonian in Glasgow is a large medical school, 7808-7813; the opening up of Arts education and degree is the great question of the day in Scotch Universities; thinks there should not be a new degree, but M.A. allowed to be taken with alternatives; great point in Aberdeen is that bursaries are tied to Arts curriculum; above two-thirds of the Arts students hold bursaries on condition of going through; if M.A. is offered by alternative curricula, the bursaries can be held by students following these; many bursaries are tied to the M.A. degree; opposition to opening it up arises from three sources: *first*, the Church, for which the present curriculum is specially preparatory; not fair, since Divinity students form at most but a fifth; *second*, Classical teachers, and others educated under the old system, believing in nothing but Classics, with more or less Mathematics, and attributing the success of Aberdeen men to this education; not true; cause of it is rather superiority of

race and better paid schoolmasters through the Milne and Dick Bequests; above all, the bursary competition, which supplies picked men to begin with; these must continue to do well, or forfeit their bursaries; what Aberdeen needs is the Commission to force upon it the reform of its Arts curriculum, and give more modern education; Aberdeen people have little idea of systems elsewhere; entire local self-satisfaction; an outside power alone can effect what is required; *third*, and chief difficulty, is the pecuniary interests of professors; remedy, a common fund, each professor receiving in proportion to his amount of work; the weakening of individual energy would be compensated by harmony among professors, causing greater efficiency; if any of the courses are to be made optional, there seems no other way than having a common Faculty fund; if there is a system of bifurcation, bursaries would run along the diverging lines; the competition forms a very good preliminary examination; having passed it, student might at once choose his own line, 7814-7819; would not make Greek necessary, but all should have some Latin, 7820-7822; the necessary subjects in the competition now are Latin, Greek, Mathematics, which are the staple; subordinately, English Literature; and among alternative subjects, German, French, Chemistry, Zoology, Botany; German, French, or a science, might be substituted for Greek, 7822-7828; thinks Aberdeen should have a B.Sc. degree, such as that in Edinburgh, chiefly to encourage intending Medical students to pursue preliminary studies in University; present Arts curriculum unsuitable; only about one in ten Aberdeen Medical students have taken M.A., and these are due to the bursaries; intending Medical student cannot afford more than two years for preliminaries; two winter and two summer sessions would suit, or optionally, three winters; would relieve the overburdened Medical curriculum; present rules for the Edinburgh B.Sc. would require modification; should be simply a pass examination in each subject; after preliminary examination to test school education, there should be attendance on Natural Philosophy, Geology, Zoology, Botany, Chemis-

try, Logic; would not make B.Sc. imperative on Medical students; those that desired D.Sc. would require another year's study, and pass a higher examination; would not include Physiology in B.Sc. curriculum; reasons, 7828; seems both duty and interest of Universities to educate teachers; if B.A. or B.Sc. were attainable on a two years' curriculum, one or both would be much sought after; thinks a separate Faculty of Science unnecessary; in Germany, Science professors are included in the Faculty of Arts; B.A. would suit students of various classes, who cannot stay four years; mainly important for teachers; while B.Sc. would be chiefly, but not solely, for intending Medical students, 7828-7832.

New professorships or lectureships.—Does not think the Commission need take action respecting lectureships on special portions of Surgery and Medicine; may be left to private enterprise; such courses better given at hospitals and dispensaries than within College walls; Aberdeen greatly needs chair of Pathology; Edinburgh has one, with a course of 100 lectures; Glasgow, a course of 50 lectures; Aberdeen, no provision; students are left to pick it up from the infirmary pathologist; German Universities always have this professorship; the subject has become so important that better be without chair of Practice of Medicine than Pathology; a mere lectureship will not do; an endowment of £400 necessary; for Strasburg, a smaller town, and much smaller school of medicine, than Aberdeen, German Government is erecting a building for Pathology, costing £20,000; course has become of great value in Edinburgh; the definition proposed is, 'Pathology, a course of Instruction in General and Special Pathological Anatomy and Physiology;' there should be 100 meetings—half for lecture, half for demonstration, 7832; to Faculty of Arts should be added chairs of English Language and Literature, Modern Languages, Theory and Practice of Education; English Literature cannot have justice as a subordinate subject in Logic course; students regard it as unimportant; endowment of £200 would suffice; Professor of Modern Languages should not teach the elements; desirable to

have separate professors for Geology and Zoology, if endowment can be had; difficult to find one man an authority in both. 7884.

Assistance and apparatus. — For witness' class only one assistant is provided; Senatus grants £45 for a second, makes it up himself to £80; can scarcely get a qualified man for a time, and none that will remain; has from 150 to 200 students, each working daily two or three hours; amount of Anatomical teaching far exceeds any other in the University; suggests £125 for first assistant, £100 for second; no provision by Ordinance for Anatomy class expenses, which were £140 last year; ordinary grant by Senatus is £80; extra grant, £50, which is uncertain; suggests that Aberdeen should have the same as Glasgow and Edinburgh from the General University Fund—viz. £300 for assistance and class expenses; hands in statement of the Professor of Chemistry of his wants; he submits that the sums allowed for assistance and materials is insufficient; witness thinks this application reasonable; important that Chemistry, Anatomy, and Natural Philosophy be well provided for in assistance and expenses; all professors should have some kind of assistant; the three practical chairs, Medicine, Surgery, and Midwifery, have assistants in hospital clerks; still they should have University assistants; Surgery class should have by Ordinance £50 for expenses; those of several other classes might be left to be voted from general fund, 7837.

Length of sessions. — The objection to change is, that many not Scotch study in Scotland, and it would need the joint action of licensing bodies in the three kingdoms; two sessions of four months each would be an improvement, but should not be attempted by Scotland alone; would like to begin middle of October, and end middle of July; the four Universities could agree to this without Commission; though April and August seem to be rests, they are much occupied with examinations; there should be a summer session in Arts, the full curriculum being taken in three years; bursaries could be arranged accordingly; students who live by teaching have best opportunities in town and during session; monstrous that general education should be

suspended seven months in the twelve; bad for students; no grievance for professors to teach in summer session, but they will not do it unless obliged, 7838.

Extra-mural teaching. — Witness does not agree with the arguments of Aberdeen Senatus against extra-mural teaching; not correct that no private lecturer can cope with professor in subjects requiring apparatus and specimens; did it himself successfully in Edinburgh; no difficulty in lecturers finding rooms near College in Aberdeen; no occasion for alarm among professors; little chance of success for extra-mural teaching in Aberdeen, except against a very inefficient professor; advantages of competition; best way to get rid of inefficient professors; best remedy for the neglect of research; a professor should be well remunerated if active, but suffer if lazy; witness would at once open the teaching in all the Faculties; present regulations would suffice; might go further than allowing a fourth of the classes to be so attended, but thinks it both unnecessary and offensive to require student's name in a special book; professors should not have means of ascertaining what students attend extra-mural classes, 7839.

Election of officers. — All are agreed that Rector in Aberdeen should be elected by general poll of students; witness thinks once in four years preferable to three; Aberdeen students choose wisely, and the Rector and his assessor have always been regarded as the best part of University Court; Medical Faculty requires seven examiners, so remunerated that men from other schools can afford to come; best system would be assessor examiners appointed by the State, to act for the four Universities, with the local professors; the mode of appointing professors requires serious reconsideration; if one Curatorial Court for the four Universities were thought of, Aberdeen would trust the Rectors; if the patronage is continued in separate Courts, they should not be the ordinary University Courts, including two Senatus assessors; the place of these two should be supplied for the curatorial function by two elected by University Court or appointed by the Crown; if not so modified, witness considers Crown patronage safer than that of University Courts; German

method of appointing principal; one of the professors is elected annually; it is not a salaried office; he teaches as before; originally Scottish principals taught, and had to reside closely in College; now principal has scarcely any duty, but great power; witness prefers the German method; the salary would endow two new chairs; principal should be a general dean, 7840.

Emoluments of professors.—The Physiology (Institutes of Medicine) chair stands most in need of increased endowment; this science has made such progress that it requires the undivided attention of the professor; the Faculty has mentioned not less than £400; less would scarcely tempt a fit man to give up his practice, as he ought to do; endowments of other chairs; desirable that the Professors of Surgery, Practice of Medicine, Midwifery, Materia Medica, and Medical Jurisprudence, should be able to abandon ordinary practice, and attend consultations only, 7841; Botany requires greater increase of endowment than Natural History, because Medical students only are required to attend it; income of the Anatomy chair depends largely on fees, therefore liable to great fluctuation; the professor cannot now combine even consulting practice with teaching; nor will it do to have professors purely scientific; they must teach from the professional point of view; the remuneration therefore must be such as to induce men to give up practice; but it is the amount of labour that demands special consideration; witness is closely employed eight hours daily; on his feet six or seven of them; the chair of Chemistry comes next in point of work, yet does not amount to half; and the other chairs bear on comparison; if class fees are raised, provincial Universities should continue lower than Metropolitan; Aberdeen Court considered the fees for second attendance on the same class; only change in Medical Faculty was rise of £1, 1s. for second attendance on Botany, Natural History, Chemistry; in Arts a guinea for second attendance on any class; information concerning emoluments from fees from Medical classes will be fallacious unless taken over a long period; for Aberdeen they should date from the union of the Colleges; witness doubts the expediency of raising fees at pre-

sent; advises increase of endowments; thinks that for the Medical Faculty in Aberdeen there should be two rates of endowment; higher for Physiology, Botany, and Natural History, not less than £400; lower for professors who practice, not less than £250; Chemistry and Anatomy might have the lower rate, because they have considerable fees; but their much more laborious teaching entitles them to the higher, 7842; no Aberdeen professors were examined before the Royal Commission on Science Instruction; the Senatus declined the invitation, the majority having no desire to open up questions of scientific or other modern education; witness disapproved of its decision, 7844-7849.

Bursaries, etc.—Aberdeen has a very large number of bursaries in Arts, only two in Medicine; witness thinks that from twelve to fifteen could be well bestowed by competitive examination in the subjects of the first year; thinks also that a number now confined to Arts students might be transferred to Medical; that any Executive Commission should have power to revise all foundations; that regulations for bursary competition should be made by Ordinance, not left to Senatus; thinks also a bursar who has gained by competition should be allowed to attend certain classes and omit others, 7850.

Financial position, etc.—Witness shows figures to prove that Medical students contribute nearly three times as much to General Fund as Arts and Divinity Faculties together; yet Medical classes can hardly receive back what is needful for assistants, class expenses, etc.; grants were obtained for assistants only after a legal opinion that these came under the words 'ordinary current expenses' in the Ordinance; Aberdeen Ordinance provides that the residus of General Fund shall be for the library; the sum of these residus since 1861 has been £6724; after meeting all wants of library, there is an accumulated library fund of £3090, besides a reserve University fund of £1848, 19s.; Faculties of Arts and Divinity receive from General Fund more than they contribute; when Medical professors need help, they are outvoted by those in Arts and Divinity; witness thinks it would be well if each Faculty had its own matriculation and graduation

fund, handing over the balance after providing for its own wants; Arts Faculty ought to raise more; the charge of £3 for M.A. degree might be raised; Medical student has to pay £20 for pass degree, £15 more for M.D.; thinks professors should keep to teaching and research, not administering funds, 7852.

**Libraries and museums.**—Witness thinks a Parliamentary grant for library would be reasonable; the more so because Medical teaching has been stinted to provide for it; but he would speak chiefly for museums; the collections are placed near the respective class-rooms; Natural History Museum is excellent, and expense moderate; admission free on Saturdays, small charge on other days; suggests an annual grant of £100; Botanical Museum receives annually £10; Parliament might reasonably grant £25; Anatomical and Pathological receive from fund £20 each; the Anatomical has been witness' own work; the collection is pretty well advanced; it is conveniently placed for study, and forms an indispensable addition to the teaching power; thinks no curators necessary; the professors take charge of their respective collections; best help is an intelligent, neat-handed servant; suggests £100 for each of these two; the union of Colleges in 1860 left several lecture-rooms vacant, and they were converted into laboratories; all departments have sufficient space, except the Anatomical, which requires enlargement; several internal changes also in removing partitions; some day in future Marischal College will require extension; explanation of how this may be done; unfortunate that Natural Philosophy is not located there with the other Physical Sciences; some shelter for students between classes is required at King's College, otherwise the buildings are sufficient, 7852\*.

**SWAN, PROFESSOR, St. Andrews.**—Is Professor of Natural Philosophy at St. Andrews, Dean of Arts Faculty, Senatus Assessor in the Court; Professor seventeen years, Assessor four years, 1546–1549.

**Constitution of University Court.**—There ought to be more members; there is beating up for quorum before a meeting; sometimes very important business transacted by a small

number; only four were present at last election to Medical chair, 1549, 1550; General Council may wish another representative; well to balance it by another Senate assessor, 1551; the two principals might sit alternately for three years, not both at once, 1552–1555, 1687–1691; thinks the Rector should not have power to appoint an assessor; reasons, 1555–1559.

**Course of study in Arts.**—M.A. has always been intended as a stamp for general culture, but there might be two groups of subjects; witness thinks the specialists will be amply provided for by Science degrees, and he would be sorry to see M.A. no longer the stamp of a liberal education—Greek left out, for example, 1563; thinks there is at present a heavy burden on the candidates for M.A. through the regulations of 1858; the arrangement of splitting up examination has worked well, but tends to overdoing, 1564–1568; examinations are more thorough, standard rising; there are better helps from books, 1572–1576; lest difficulty should increase, student might have option of getting off more easily on some subjects by reaching higher standard in others, 1576.

**Entrance examinations.**—A stringent compulsory entrance examination would shut out a large and deserving class; witness regards it as a great advantage to Scotland that its Universities have been for the people down to the lowest; some of St. Andrews best students labouring men, working hard half the year; very slender education to begin with; making it up rapidly, 1570 and 1580; considers secondary education should be encouraged by competition bursaries, 1571; and inducing primary schools to continue education in higher branches; does not wish entrance examination at present, 1577, 1578; a large proportion of witness' students come from primary schools; the majority totally ignorant of Natural Philosophy; yet able men make reasonable proficiency; entrance examination would have excluded them, 1582–1588; Chemistry was added to the Arts curriculum at St. Andrews in consequence of agitation for reform, and to increase professor's emoluments; very objectionable, 1588, 1589.

**Assistance and apparatus.**—No

accommodation or assistance for Natural Philosophy laboratory, 1595-1599; was examined before the Scientific Commission in 1872; gave evidence on the wants of his own chair, 1599, 1600; should now say £200 required for assistance and apparatus; details of work and funds to assist it, 1601.

Suggestions and discussion respecting Arts with honours; thinks students should be allowed to compete for honours after being capped, if within two years, 1603-1617.

New professorships.—St. Andrews has professors enough to qualify students for B.Sc., except one for Botany; thinks too much is made of Natural History in the grouping of subjects; Edinburgh programme better, 1617-1630; discussion of lectureships at Dundee; proposal some time ago for a College at Dundee, affiliated to St. Andrews; scheme now is, students to matriculate at St. Andrews, but reside at Dundee, and have lectures there to qualify them for taking B.Sc.; no objection to this plan, but care should be taken that such lectureships do not compete detrimentally with the chairs at St. Andrews, 1630-1638; Dundee a great field for cultivation, 1639; affords greater advantages to students, 1636; advantageous if Faculty of Science had its location in Dundee, 1644; Chemistry might go there, but witness' class must remain while Faculty of Arts is maintained at St. Andrews; could not lecture at Dundee also, 1645-1648; very large proportion of own students are intended for the Churches, 1653; Dundee seems to want a combination of Scientific School and School of Mines, 1655; the point is how to associate that with the University, 1656.

Length of sessions.—Would not lengthen session or break it up; professors should have time for study and research; the poorer students would be excluded by summer sessions, 1658, 1659; few remain at St. Andrews during long vacation, chiefly those that get private teaching, 1660-1663.

Election of officers.—Private patronage produced inconvenient results some time ago, 1663; best to abolish it; three chairs are subject to it, 1665; if not abolished, might be limited by patron being required

to choose from a list nominated by Senatus or College, 1664.

Finance.—Statement of income and expenditure from 1870-76, 1677; shows a sudden falling off of surplus; cause has been assistants' salaries and other increased expenditure, 1668.

Retiring allowances.—Present scale of allowance not liberal enough to induce infirm professors to retire, 1670, 1671; the power to compel retirement has never been exercised by St. Andrews Court, 1672, 1673; witness recommends that professor sixty-five years of age should be entitled to retire on full salary, provided he has served twenty years; if not, the allowance to be proportioned to his period of service, 1674-1680; a professor disabled after very few years' service to be dealt with as a special case by the Treasury, 1680-1683.

Buildings.—Library accommodation is all but exhausted, 1683; some room needed for laboratories and apparatus, 1686.

Witness said above that to increase the number of the Court he would rather have a professor to represent the Senatus than the second principal, but principals might sit alternately; thinks one principal enough, and Colleges might be united into one; or, let the Principal of St. Mary's College remain merely a Professor of Theology; on the whole, best to unite the Colleges in one, 1691-1702.

TAIT, PROFESSOR, Edinburgh.—Is Professor of Natural Philosophy, University of Edinburgh; succeeded Professor Forbes in 1860, 1171-1174; witness was examined in 1872 before the Commission on Scientific Education; gave evidence about his own chair, and its wants; written statement was printed, 1174-1177; some changes since then; addition of £80 a year to salary under Baxter Bequest, and £50 for class expenses from General Fund; the latter is precarious; additional assistance from the holder of a scholarship, 1177; further facts as to success of witness' pupils, 1178.

Course of study, etc.—Has been long convinced that there must be some degree more easily attainable than that of M.A.; would be of great service to schoolmasters, and might be made compulsory on them, 1180;



the present groups are called Classics, Philosophy, and Mathematics; would add two others, 1181, 1182; thinks it might be tried to have a preliminary examination, to insure general education; then let proficiency in any two groups entitle to the B.A. or inferior degree, 1185, 1186; it might be that a man would receive B.A. chiefly on account of Scientific attainments, therefore witness would not say that the degree should be called B.A., 1187; preliminary examination should include English, one ancient Classical, and one modern European language, 1192.

Entrance examination.—Thinks to refuse any student admission to lectures would be inconsistent with the duty of a University; some of the very best students witness has ever had came totally ignorant of his subject, and in six months made wonderful proficiency, 1197; thinks teaching is the proper function of University, and granting of degrees trifling in comparison, 1194–1196.

Length of sessions.—Impossible to extend the winter session; students are often Highland schoolmasters, who must return to work; something might be done in summer; witness is trying summer classes as an experiment, for the sake of Medical students, 1199–1202; a little Natural Philosophy is required for their preliminary examination, but hundreds pass it without attending the course, 1203, 1204; such knowledge cannot enable them to understand physiological processes, 1204–1207; above twenty Medical students are now attending witness' class, and their first summer session in Botany and Natural History, 1207, 1208.

Extra-mural teaching.—This has been of great service to the University; is a provision against the incompetence or temporary disablement of professors, but existing interests should be provided for before throwing the teaching open, 1209, 1210; would approve of recognising extra-mural teaching in Arts on much the same as present conditions in Medicine, if professors' salaries were increased; no objection to the recognition of such teaching in Natural Philosophy, 1214, 1215.

New professorships and lectureships.—Very important that witness should have more assistants and demonstrators, 1217; suggests the

transfer of Hebrew chair to Arts Faculty, to make it an open one; if Hebrew forms part of Theology, much more should Greek, 1218, 1219; gives no opinion as to whether other Theological chairs should be open to members of other Churches, 1220.

Constitution and powers of University Court, etc.—Witness and colleagues have felt the remains of civic influence annoying, especially in the curators appointed by the Town Council; the Court persists in meddling, giving the professors great trouble to procure information of which no use is made, 1220; example, 1224; thinks Edinburgh Court should be constructed like those of Glasgow, St. Andrews, and Aberdeen, 1221; supposes Edinburgh Court has held more meetings than the other three put together; seems to look upon itself as a descendant of the Town Council, 1223; witness would take out of it the civic element, as seemingly the only cause of this pernicious activity, 1226–1232; objects also to this element in the Board of Curators for administration of patronage; reasons, 1232–1235; admits that something was obtained lately from the civic element in reference to increased accommodation, but Town Council could never repair the damage formerly done to the University, 1235, 1236; of late Town Council has been shamed into appointing better curators, being influenced perhaps by the anticipation of a Commission, but better not give it the chance of going back again, 1237–1246.

Election of officers.—Thinks the Senatus would be a good body for electing professors, by excluding on each occasion the members of the Faculty to which the appointment is to be made, 1246.

Medical students are not obliged to attend Natural Philosophy; very few do, 1249, 1250; about one-fourth of witness' students go through the whole Arts curriculum, 1251; a very large number attend University only one session, taking Natural Philosophy and Engineering, or Geology, 1252; thinks the regulations for examinations are cumbersome, and require revising; has had to examine the same man, on practically the same subjects, and up to about the same standard, three times in one week; very troublesome, 1255–1259; need of more examiners, except in the

Medical Faculty; extra-mural examiners do well combined with professors, most of them being Edinburgh graduates, 1259-1262; the reason for increase is chiefly to lessen the labour, 1262-1265.

Reverting to what witness said about the University Court, does not mean it to be a mere court of appeal, but it should not give unnecessary trouble; further examples, 1265-1270.

THOMSON, PROFESSOR ALLEN, Glasgow.—Has been Professor of Anatomy in Glasgow University since 1848; is a member of Senate, and was four years its representative in the University Court, 2739-2745.

Constitution and powers of University Court.—Is aware of the difficulty sometimes felt about a quorum; believes there should be at least one additional member; perhaps the safest plan would be that Government should nominate, all the more that it might appoint the Lord Provost; thinks the civic element might be beneficial, 2745; fears it would not be best to have another representative of General Council; believes that in some cases the election would be a vote between Established and Free Church; in others, it would turn on political grounds; Council has generally chosen good men as assessors, 2746-2749; functions of General Council better remain as at present; increased powers would be exercised chiefly by a few, 2749, 2750; the body numbers above 2000, the ordinary meetings from 50 to 80; double that on great occasions, 2752-2755.

Course of study and graduation.—Holds that degrees of all kinds should be encouraged as much as possible; is favourable to re-establishment of the B.A. degree, and opening of Arts degree to include more subjects; might be five departments, and, after preliminary examination, proficiency in two might suffice for B.A., and three for M.A.; great object being to give latitude of choice; departments might be Literature, Mental Philosophy, Mathematics and Physics, History and Political Economy, Natural Science, 2755; though two Scientific subjects were chosen, B.A. might be given, 2761-2764; in Literature, would give choice between Latin, Greek, and a modern language,

2772; approves of a simple entrance examination, and one preliminary to Arts degree, including elements of Mathematics, and one language, 2767; thinks there should be more non-professorial examiners in Arts, 2774, 2775; in Medicine, final examination presses heavily; proposes that the whole subject of Anatomy should be examined at the end of the second year; reasons, 2776, 2777; is favourable to lengthening the course of study; first examination might be after two summers and one winter; does not approve of examination upon individual subjects immediately after instruction; better have groups of subjects at stated periods, 2777-2782; describes course of study and examination, with reasons, 2782; would substitute Natural Philosophy for Mechanics in preliminary examinations, 2788; has drawn out a scheme involving four examinations for M.B.; explanation of it, 2795; thinks it unreasonable that if a student is rejected in one subject he must be re-examined in the whole group, 2796; students should attend nine months of Clinical Surgery and nine months of Clinical Medicine, 2796; three months' Experimental Physiology, which might be in third summer, 2797; desirable, if possible, that students should not have to keep up many subjects at once; in some branches it is the cultivation of mind, not the retaining of facts, that is valuable, 2800-2803; Medicine in Glasgow has now seven non-professorial examiners; could scarcely work well on fewer than ten; question is how they are to be paid, 2803; no difficulty in obtaining good ones as now remunerated; they act precisely on the same footing as the professors, 2804, 2805; Edinburgh has twelve receiving £50 each, 2808; Pathology now belongs to Institutes or Theory of Medicine; desirable it should be separated; three months' course sufficient; the plan in Glasgow is to recognise the lectures of the hospital pathologists; University ought to have a professor or lecturer of its own, 2815-2821.

Entrance examination.—Would regret if any were excluded by entrance examination; admits that professors should not have to teach the elements of Latin; students claiming University privileges should pass entrance examination, otherwise ought to be

admitted to class only as hearers; desirable to raise the standard of University instruction in Classics, 2821-2824; other professors have to begin their subjects at the beginning; better student untaught than badly taught, 2824, 2825.

Some unimportant changes in witness' evidence before the Commission of 1872, 2826-2836.

Approves of Science degrees; very few have been conferred; approves of the four departments of Physics, Biology, Geology, and Engineering, with preliminary examination in two languages, Mathematics, and another Arts subject, 2838; thinks there should be non-professorial examiners; doubts whether there should be a separate Faculty of Science, 2840.

New professorships.—Thinks the teaching staff should be increased, but the Senatus not much; would become cumbrous; some important subjects, as History, should stand on the best footing; Modern Languages should be represented somehow; might be a distinct chair of Geology, if Zoology were sufficiently provided for; might be theoretic teaching connected with the Fine Arts, 2843-2848; scientific research not likely to be hindered by the obligation of professors not to teach anything contrary to Established Church doctrine, 2848, 2849; would be glad to see more lectureships—Political Economy, Insanity, Ophthalmology, Diseases of the Ear; students should not be bound to attend them, and they could scarcely all prove remunerative, 2850-2862; in the Arts course there may be assistance from scholarship funds, 2862; £1320 annually are distributed among eleven persons, some designated teaching scholars, 2863; would utilize these scholarships or fellowships, by requiring the holders to teach especially the Arts classes in summer; subjects taught same as winter classes, but so divided that two summers would be equal to one winter, thus shortening the Arts curriculum, 2864-2867.

Length of sessions.—Thinks there would be advantage in beginning winter classes middle of October, completing half session before Christmas; then at least a fortnight's holiday; session concluded end of March; April for examinations and holiday; summer classes might begin 1st May, 2867, 2868; in some respects two

sessions of four months each might be better, but all attempts to establish them have failed; it is said that the long vacation procures men who otherwise would not accept the Arts chairs; but witness would make summer teaching voluntary, and thinks the opportunity of adding young men to the staff of teachers would be advantageous, 2868; thinks summer classes would be the safest way of introducing the recognition of extramural teaching in Arts; a certain monopoly necessary to support University system, but this modification would not be felt vexatious, 2869; would at present recognise no non-professorial teaching in Arts except these summer courses, 2870.

Election of officers.—All are agreed that the Rectorial election should be a simple poll; no use in maintaining Nations; the usual disturbance would be mitigated; young men do scarcely anything for the fortnight before election; greatest evil arises from canvassing junior students; would be improvement to exclude those of the first year, 2871-2873.

Emoluments, etc.—Emoluments of Physiology class are insufficient, 2874, 2875; the professor ought not to be in practice; there is no provision for expenses of that class; own chair has endowment of £250, fees above £1000, 2877, 2878; chair of Natural History poorly provided for; endowment of assistants is a right thing; provision for these and apparatus is imperfect in many of the practical classes, as Surgery and Botany, 2882, 2883; thinks professor ought to bear part of the expense for apparatus and materials, a check upon extravagance; his allowance should be scarcely adequate, 2884-2887; thinks there might be some rise in graduation fees, and a considerable portion used to pay non-professorial examiners, 2888, 2889; scale of retiring allowances is too low, and a certificate of incapacity is required, 2893; would give right to retire at sixty-five or seventy, especially after thirty years' service; might be made obligatory, with the provision that a man could be retained by invitation of three-fourths of the Senate and Court; in some chairs a man could scarcely serve more than twenty-five years, 2894-2897; thinks it would be imprudent to raise the matriculation fee; class fees are too low, 2897.

**Financial position.**—Glasgow University labours under great financial difficulties, 2900; debt of £45,000 on the Removal Scheme, for which interest has to be paid, and an increase of annual expenditure, £1070, caused by removal, 2901–2910; many necessary expenses for efficient working have been curtailed, as in Library, Museum, Observatory, 2903–2906; would require above £70,000 to finish buildings; altogether about £119,000 to pay debt and complete the undertaking, 2911–2914; accounts in part for the expenditure exceeding the means; difficult to explain, because it went on insensibly; several considerable changes in the plan, 2914–2918.

**Hunterian Museum.**—Would regret parting with the coins, but would yield if funds can be procured for Museum no other way; desirable to sell them to a public body, as the British Museum, 2920; scattering by private sale would realize more; ought to produce £20,000, 2921; the library of Hunterian Museum is of great value; more curious than useful, but it is often consulted, 2922–2925; coins are different; great difficulty in keeping them; a number of duplicates might be retained, and electrotypes of rarities would serve the purposes of instruction; thinks the proceeds should be applied to the Museum, 2925–2931.

Further, on financial difficulties, details on withdrawal of the archbishopric revenue, explaining the low state of disposable funds; University has considerable funds for bursaries and scholarships, but its teaching powers are hampered by present difficulties; Government allows Edinburgh £500 a year for maintenance of buildings; no allowance to Glasgow, 2931, 2932.

**THOMSON, PROFESSOR SIR WILLIAM,** Glasgow.—Has been Professor of Natural Philosophy in Glasgow University since 1846; is LL.D. of Trinity College, Dublin, and of Cambridge University; also D.C.L. of Oxford, 10,075–10,079; held office in Glasgow University Court from 1871–1875 as *Senatus Assessor*; has also attended meetings of the General Council; was himself educated at Glasgow, 10,079–10,084.

Constitution and powers of Uni-

versity Court.—Thinks the present arrangement satisfactory on the whole; desirable that Senate should be more fully represented in electing a professor; reasons, 10,084; suggests that on occasions of election, two members of Senate should be appointed by Senate; 10,085–10,090; does not think the plan of having a report from Senate upon the qualifications of the candidates could be worked well, 10,090; thinks the Court, with the suggested addition, as good a body as could be found for administering patronage; the body that manages affairs should make the appointments, 10,092; the patronage vested in Glasgow Court is considerable, and very satisfactorily exercised, 10,093, 10,094; would like to see Crown patronage transferred to Court, and thinks it would be a very great improvement in Scotch Universities if patronage of all professorships were vested in Court, with the above modification, 10,095–10,102; the Senate itself would be a satisfactory electing body, but there are objections against it, 10,102; Senate never had the patronage of chairs; it was the Faculty of the University, the technical name given to professors on the old foundation; Senate included also professors on newer foundations; there was dissatisfaction that patronage should be vested in limited number of professors, 10,103–10,106; does not think Court would be improved by another representative of General Council, but it might be good for the sake of securing a quorum, if there were also an additional representative of Senate, 10,106–10,109; the Senate has virtually two representatives—the assessor and the dean; the principal is not a representative, but forms a means of communicating the wishes of the Senate; his own views may be adverse, 10,109–10,113; even if there were two regular *Senatus assessors*, thinks it would be desirable to have two special representatives in case of an election, 10,113; University Court has worked well and harmoniously with the Senate, 10,114, 10,115; it consists practically of only six members; the quorum required is five,—too large,—but might be very proper with the proposed additional representatives, 10,116–10,119.

Functions of General Council.—

Does not think it desirable to increase its power; thinks it well adapted for discussing and helping to form public opinion on University work, but not for actually controlling or legislating, 10,119, 10,120; meetings are not largely attended; if this is for want of something more to do, it forms no sufficient reason for increasing their power, 10,121, 10,122.

Course of study. — Thinks the curriculum too heavy in Classics, Logic, and Moral Philosophy, 10,123; student ought to be able to enter University knowing no Greek; professor ought to begin at the rudiments, to make the teaching more scientific and more perfect, 10,124–10,129; people are scarcely clear of the idea that Greek is a mere schoolboy subject; of old the public schools had nothing to teach but Latin and Greek; thinks that an able professor could impart to a young man a valuable amount of Greek during the two sessions required by present rule; would be sorry to see Greek removed from compulsory subjects in Arts degree; but would demand only as much as a young man of moderate capacity could acquire through faithful attendance and fair private study, 10,128; there ought to be a shorter list of books both in Greek and Latin; some knowledge of the literature, very little more than a fair elementary knowledge of the languages, 10,131–10,136; for an ordinary degree, in the Classics, it would be a question between that and nothing; impossible, in the great pressure of subjects, to keep up Classics, unless student can pass with a limited amount of labour, 10,136–10,139; thinks there is too much of Metaphysics in the course of Logic and Moral Philosophy; everything that is technically called Logic should be taught in a very short time; one winter session for the whole, or two of not more than one hour a day each, 10,139–10,153; proposes to get a great deal more time for Mathematics and Natural Philosophy; would not require longer attendance at University, but gain the time by shortening the list of Classic authors, and sparing an hour a day from Logic and Moral Philosophy classes; would not borrow any hours of attendance from Classics, but get more of the student's time out of class, 10,153–10,161; would wish much to have Chemistry in

the Arts course; an hour a day would be a variety to the mind from Classics, Logic, and Moral Philosophy; would need little more time than that of attending lectures, 10,161–10,165; as to a uniform course for M.A., or a variety and choice, thinks a certain course ought to be prescribed to all as a minimum, 10,166; some that pass at the minimum in Natural Philosophy might have high attainments in Classics; would to some extent allow one to compensate for the other; present system does not allow it; perhaps the fairest is the arrangement that the examiners meet and discuss the cases, 10,166–10,169; for the ordinary degree, does not approve of dividing the subjects and giving alternatives, 10,172; it answers well as regards honours; thinks that what is required in Mathematics and Natural Philosophy is the very minimum that should be considered sufficient, 10,173, 10,174; no degree should be given without some knowledge in each department of present curriculum, 10,176; does not admit that any man has natural inability to acquire Mathematics, if he is capable of learning Latin and Greek; the failure is from want of application, which may result from the mind being overburdened, 10,177–10,181; degrees in Science have recently been introduced in Glasgow; does not think a separate Faculty of Science desirable; approves generally of the arrangements for Science graduation, 10,183–10,188.

Entrance examinations. — Is against entrance examinations, except for boys under sixteen, 10,188, 10,198; if men come up not knowing Latin, there ought, perhaps, to be supplemental teaching by assistants to help them; the teaching of the class should not be injured for them, 10,188; approves of the existing entrance examination which is the condition of a student's admission to the senior Greek, Latin, and Mathematical classes in his first year, 10,189; would not apply that examination to those who are proceeding from the junior to the senior; a student who faithfully performs the duties of the junior class must be admitted to the senior; a different thing to admit direct to the senior; it demands evidence of superior scholarship, 10,190–10,197; thinks it would be a violation of the

principle of Scotch Universities to reject any adult; such men attain sometimes to very high excellence, 10,198.

Length of sessions.—Would not change the length of University sessions, 10,199; session at Glasgow is six months, as nearly as the weeks allow; vacation is eight days at Christmas, 10,199–10,204; does not think the session too long a strain, or that a longer vacation at Christmas would be desirable, because few could afford to go away; the use of a vacation to most students is affording time to work for their own support, 10,204; Medical classes have a summer session, 10,206, 10,207; very desirable that there should be tutorial teaching through a great part of summer; witness has his laboratory open, and two assistants constantly there; few avail themselves of it, 10,208–10,212; thinks there is no demand for tutorial summer teaching in Arts; the experiment was tried, and failed; those who could afford to attend it leave Glasgow during the summer, 10,212, 10,213.

New professorships.—Might be desirable to have professorship of Geology apart from Natural History, 10,215–10,218; there should be a well qualified teacher of Surveying, and at least one master of Drawing, associated with the Professor of Engineering, who would teach the principles, 10,218–10,228; for Natural Philosophy, a demonstratorship, with £500 a year, and one highly qualified assistant besides that provided by Ordinance; there is some assistance from scholars and fellows, 10,223–10,235; the aggregate needed for witness' assistants at least £700, towards which there are £220, 10,235, 10,236; apparatus fund of £100 a year barely covers tear and wear, with cost of materials, etc.; should be £50 a year for ordinary new apparatus, and a fund to which professor could apply if larger expenditure were needed, 10,237–10,240; late Commission withdrew the allowance out of graduation fees, holding that £200 a year for assistance and apparatus was equivalent; witness thought Commissioners exceeded their powers; petitioned, then compromised for £50 a year for life; thinks that £50 a year should be permanent, and increased to £100, 10,240; the emoluments of the chair

ought to reach £1000 a year, plus the house; fees are £4, 4s.; amount now to £560; would not raise rate, 10,241–10,248; gave evidence before the Scientific Commission; it may be held part of this evidence, 10,248–10,252.

Extra-mural teaching.—Thinks it would not do in Arts as it does in Medicine; effective teachers not likely to be forthcoming, 10,253, 10,254; demand for Medical teachers produces supply; many medical men lecture to advance their practice; Arts teachers would have no such inducement; Andersonian Institution has had very able men in Chemistry, 10,255–10,260; when witness' predecessor was in bad health for years, place was well supplied by assistants; there was no extra-mural teaching that would have been better; thinks, with good staff of assistants, the Arts departments would be better taught than in extra-mural institutions, 10,260.

Retiring allowances.—Thinks a professor of certain age, wishing to retire, ought not to need certificate of permanent incapacity for teaching, 10,261; sixty a proper age after thirty years' service; more difficult to persuade a man to retire when he ought than prevent him when he ought not, 10,262; approves of the Russian system, by which after a man has served thirty years he is bound to retire on full pay, unless he is requested and consents to continue at double pay, 10,263; is decidedly of opinion that Principal ought not to be professor; his duties quite enough for one man, 10,264, 10,265; his weight as chairman arises much from his not being a professor, 10,266.

Financial position of Glasgow University.—Supposing the buildings finished, present funds are insufficient for maintaining them; better the Board of Works should undertake this than University have an annual grant, 10,273, 10,274; there ought to be funds for special purposes, as purchase of apparatus or modifications of class-rooms, 10,273–10,276; the large debt with respect to building partly includes repairing expenses of some years; many new professorships have been created within the last forty years, without corresponding addition to University funds; Crown instituted them, and the University funds were burdened with expense of

premises and other matters; thinks with every new professorship University should receive contribution for lecture-room and expenses, 10,278, 10,279.

THOMSON, PROFESSOR JAMES, LL.D., Glasgow.—Is LL.D. of Glasgow, D.Sc. of Queen's University, Ireland, Professor of Civil Engineering and Mechanics in the Glasgow University, 11,848-11,849.

Apparatus.—In witness' department there are a few ship-models and experimental apparatus, but no engineering instruments; has himself had to provide them by purchase or loan; needs also furnishings, as presses, and blackboards for lecturing; desirable £100 or £200 for instruments to begin with; afterwards a fund, equal to £20 or £30 a year, available at convenient times within each period of five years, 11,846.

Retiring allowances.—Thinks the time a professor has served the Crown in another University should be reckoned with that from which he retires, 11,846.

Entrance examinations.—Thinks an examination of an excluding nature would be injurious in witness' department; perhaps few would be actually rejected, but a great many not fresh from school would be deterred by fear of the ordeal; a voluntary examination might be offered for those that wish advice as to their preparation for profiting by particular classes; few would accept, but the offer would justify the professor in assuming his students prepared to the extent of that examination; does not think that if demand were made at the University doors it would bring its own supply, and cause the higher development of schools; instead of trying to raise adequate schools all over the country, suggests a good intermediate school in connection with University, and under control of its authorities; if a youth were well prepared in Latin, but not in Greek or Mathematics, he might enter University course in Latin, taking Greek and Mathematics in the school; this would not differ very widely from present system of lower junior classes; but the proposed scheme ought to involve higher status and pay of the teacher; present inducements to assistants do not keep them long enough to acquire experience; this

plan would obviate the necessity for removing boys from country to large town schools, and thence again to University; presumes no change interfering with rights of existing professors would be made without providing compensation, 11,846; thinks it not advisable that the preliminary examination in order to degrees should be restricted to time of entrance; a student, however fit for preliminary examination and senior Mathematics, must go through the junior unless he has offered himself for preliminary when he entered University, 11,846-11,849; referring again to the idea of preparatory school, there is a very successful one in London in the University College building, and under management of the Senate; difference in that proposed for Glasgow is, that it should not include little boys, but be strictly intermediate, 11,849; high school and academy do not answer this purpose well; elder country boys do not assort well with the younger; moreover, could not easily take some classes at University and others at high school or academy, 11,849, 11,850; witness' chair received lately £140 a year for an assistant; it enabled him to divide the class into senior and junior, and establish one for office and field work, also so divided, 11,851-11,854.

TULLOCH, PRINCIPAL, St. Andrews.—Is Principal of St. Mary's College, St. Andrews; was appointed in 1854; is also Professor of Theology; it was merely the immemorial usage that the Principal of St. Mary's taught Divinity; the Ordinances of the late Commission definitely appointed it, 679-683; St. Mary's is entirely for Theology; the other is the United College, under Principal Shairp; Arts is its only complete Faculty, but there are three chairs outside; the University is a separate corporation, 683-688.

Constitution of University Court.—Court consists of six; most members think it enough; no practical difficulty in assembling the quorum of four, 688-692; thinks it might be desirable to increase the number, 698; witness is a member *ex officio* as senior principal; if he were removed, Principal Shairp would replace him, 699-702; is favourable to the appointment of another representative of General Council; Dr. Richardson is

present assessor, chiefly through St. Andrews having so many Medical graduates; the non-medical wish a representative of Arts, 702, 708; the Medical majority is diminishing; previous to the late Reform Bill none but Arts students were members; none of the Medical graduates have studied at St. Andrews; they came only for the degree, 704-707; the Court has worked admirably; it is the patron of four chairs, and its appointments have generally given satisfaction, 708, 709.

**Functions of the Council.**—Witness generally attends meetings of Council; frequently presides, 710; would be glad if anything could be done to make the meetings more interesting and draw more to them; there are 1527 members, average attendance about 20; it was chiefly through their influence that the Chemistry chair was placed within the Arts curriculum; they complain of their limited powers; witness cannot say whether increase of power would do good, 710-716.

**Course of study.**—Bifurcating or trifurcating the M.A. degree might be good, if done on a good common basis, to include Logic, Classics, and Mathematics, these to be indispensable, with a choice of other subjects, 716, 717.

**Entrance examinations.**—Witness is in favour of entrance examinations, compulsory in Latin, Greek, and Mathematics; if a man fails to pass at commencement of session, he might be allowed to try again at Christmas; men from parish schools often work up with marvellous rapidity, and prove better scholars than prepared ones, 718-721; parish schools have fallen off very much indeed during the last twenty years with respect to preparing for University; this lowering of standard began with Privy Council system, 722, 723; it might be expedient to fix entrance examination two or three months before session begins, but young lads would have difficulty in coming up; would be a great matter if unprepared students had to feel they could not go on without passing a certain standard by the New Year, 725; the state of Scotch Universities with respect to junior students is not creditable; their unprepared condition causes lowering in professorial teaching, 726, 727; English Universities are not

guarded by entrance examinations, but the good Colleges are, 730, 731; it is an old standing grievance that professors choose to admit unprepared men, 733; it is difficult to get them to say, 'If you cannot profit by superior instruction, it is your own loss;' it would injure their pecuniary interests, 734, 735; the greatest aid would be improved secondary schools; directors of Hutcheson's Hospital propose applying their large income to founding a first-rate secondary school in every town in Lanarkshire; a splendid one might be made of £4000 now squandered in Stirling, 736, 737; would not undertake to say how entrance examination would affect professorial incomes; it was tried at St. Andrews, and abandoned; it would not work while other Universities did not join, 738; St. Andrews has not conferred any Science degrees, but has passed a programme, 739; would make Latin, Greek, and Mathematics compulsory at entrance for Science degree; a man must know something of Greek to understand scientific nomenclature, 740, 741; it would be preferable, but difficult, to have entrance examination in hands of persons appointed by all the Universities; there would require to be some mutual understanding to secure general uniformity, 743, 744; St. Andrews degree of B.D. has not been successful; it indicates very considerable attainments, 746, 747.

**New degrees.**—Great difficulty about instituting a degree attainable in two years; witness not in favour of it, 748-751; professorships of Hebrew, Biblical Criticism, and Church History might be open, without disadvantage, to the Church, but witness does not advocate change at present; candidates for D.D. do not require to be members of Scotch Church, 752-755; progress may be made in Scientific Theology as matters now stand; nothing to prevent a man from dealing with the most advanced views; ought not to espouse them as being absolutely settled, but set them before his students as the views of certain authors; witness himself, as matter of scientific criticism, deals with the subject now agitating the world about the genuineness of the Gospels, 755, 756.

**Extra-mural teaching.**—This at St. Andrews is a question of the Dundee movement; no need for extra-mural



teaching at St. Andrews; the difficulty is to find work for the professors, 757-760; written statement drawn up in 1872 concerning various proposals for bringing the resources of St. Andrews University to bear on the population of Dundee; Mr. Stuart of Cambridge, a student of St. Andrews, and other Cambridge fellows, have lectured and examined in some of the large towns of England; Durham University has founded a College for Physical Science in Newcastle-upon-Tyne; plan proposed for Dundee; another plan in 1874 amounted to a duplicate Arts College, which St. Andrews could not entertain, 760; the hope of establishing it postponed other plans; much advice was taken, and the most intelligent of those consulted said the best way would be not a rival institution, but lectures in connection with the University; accordingly last winter (1875-76) professors gave evening courses on Geology, Physiology, Chemistry, and Natural History; Principals delivered literary lectures, 761; a fund was subscribed in Dundee, Senatus gave £100; the result was astonishingly successful, each lecture attended by at least 300, 762; those who had lectured examined at the close, and distributed certificates; people of mature years attended, but those that went in for examination were generally young men and women of various ranks, 763-766; no special class for working men, but some attended, 767, 768; the Senatus has not matured any views as to carrying on this system, but have consented to continue some of the lectures; it is a serious matter to have three professors without any adequate employment in the place—viz. those of Natural History, Physiology, and Education, 771, 773, 774; the fee in Dundee was 10s. 6d. for each course, or a guinea for the whole; almost every one paid the guinea, 772; not likely that the chair of Chemistry will remain within the Arts curriculum; students are dissatisfied, 774; witness thinks it should not remain without taking something else out; the work for M.A. is very heavy, 777.

**New professorships.**—If the lectures in Dundee were extended and made permanent, a Professor of Engineering would be required, and another of Mathematics; cannot say what their relationship to the University would

be, 781, 782; it is felt that St. Andrews has a sort of academic duty towards Dundee; no other Scotch University has too little work to do at home, 783; the Tay Bridge will bring Dundee within half-an-hour; ought to bring students; but lectures must be given in Dundee if the classes hitherto attending are to be reached, 784, 785; Natural Philosophy was particularly wanted; funds were forthcoming; Professor Swan declined; it was thought best to bring the whole subject before this Commission, 786; lectures at Dundee might be given when St. Andrews was not in session, or better, by assistant professors, 787-790; it has been doubted whether University has legal power to matriculate and teach students for degrees elsewhere than at St. Andrews, 790; the Science degree is that contemplated; the Arts curriculum not necessary; those that take it come of course to St. Andrews for a three or four years' curriculum; the students expected in Dundee would be a miscellaneous set, attending one or two years, 791-796; one year's work would not suffice, but one year's attendance where degree is taken, 796; such a College at Dundee would not interfere with the regular and moderate supply of students who have come to St. Andrews for 150 years, with little variation in numbers, 797; rather would increase it; young people might get interested in intellectual work, and be led to enter the regular professions, 798; the rules for graduation in Science require that the candidate must have attended two classes during one academic year in the University; must also bring evidence of having attended Science classes at least two other years at institutions recognised by the University, 799, 800; if the Dundee project were carried through, attendance upon lectures there would be taken as equivalent to University; the other two years either there or elsewhere, but they would generally take the three years there, 801-806.

**Length of sessions.**—A summer session at St. Andrews is not at all likely to succeed, almost all the students being hard at work during summer, 806; session begins 1st of November, ends 21st of April; quite long enough, 807, 808.

**Election of officers.**—Has a strong opinion, shared with others, that the

system of private patronage is as bad as possible; Humanity, Chemistry, Natural History, have private patrons, 809, 810; should be transferred to the University Court, 818; University Courts generally have exercised their patronage very well; since the recent Act there have been fewer complaints than there ever were in Scotland before, 815.

Emoluments of professors.—Emoluments are just as they were, and more inadequate to the times; no academic income sufficient for a livelihood, 816–819; desires to allude to the salary of Senior Principal; his duties and responsibilities are very considerable; pity there is not some emolument attached to the office, 818; witness' entire income is about £490; consequence is, hands are full of all sorts of work; no chair worth more than £550, without house; Principal of St. Mary's has the only house—a very good one, 819–822.

Bursaries.—St. Andrews has a good many bursaries, but not to compare with Aberdeen; a good many are in the gift of private individuals, and some confined to particular names and localities, 822–825; finds the private patrons of St. Mary's bursaries willing to listen to advice; the bursar generally stands well, must have passed through some examination, 825; other bursaries open to competition; a good many in the gift of presbyteries; Perth has three in St. Mary's; does not think they would be opened to competition unless there were no candidates in the circle of the presbytery, 826–831; other patrons not likely to give up their right, or attend to representation of the College if they have persons in view, 830–835.

University buildings.—In fair order as to repair, but library needs extension, 835; the right to all books entered at Stationers' Hall was commuted for 600 guineas; that is spent in books; they must be bought and in the library before the yearly accounts are sent to Government; binding and management are paid out of University funds, 836; foreign books are bought bound, because of doubts whether it is legal to bind them out of the 600 guineas; a catalogue has been prepared at great expense, 837; the general funds have in some respects greatly increased; there are three corporations, 838; the librarian's

salary is £150; the under-librarian's £80; librarian is also quæstor and registrar, for which he has separate remuneration; two assistants for the catalogue, costing perhaps £100 more, 839–844; some years £700 are spent on books, instead of £630; many English books have to be bound; £97 for binding last year (1875), 844; there is a very good museum, and in good order, 845.

TURNER, PROFESSOR, Edinburgh.—Is Professor of Anatomy in Edinburgh University, and Representative of Edinburgh and Aberdeen in the General Medical Council; is in the tenth year of the professorship, was thirteen years demonstrator of Anatomy, 2286, 2287.

Emoluments of professors.—Was examined before the Science Commission of 1872; gave an explanation of the financial requirements of the University for teaching Medicine and Science, 2290; the summary is, that if there were proper building and apparatus, with funds to employ a good staff of assistants, the University could develop itself in Scientific teaching much more than hitherto; the position now is the same, 2291; witness' chair the only one in Scotland without salary; the amount of fees very considerable; has not got the present amount in his mind just now, 2298–2296; at the last Universities Commission it was returned at £1900 a year gross; considerably more now; students were 462 last year, 2296–2299; the increase has been in the whole Medical Faculty; predecessor's net income was about £800, 2299–2304; the deductions from gross income are for assistants, diagrams, microscopes, material for illustrating lectures, etc.; subjects for dissection are paid for by students, each for the part he dissects; it is the custom in all schools of anatomy, 2306–2309.

Museum.—Witness is curator of the Anatomical Museum; provision has been made in the new buildings for a large one; the present allowance for museum expenses is £195 a year; witness has £60 as salary, and adds £40 to the £85 allowed for an assistant; pays charwoman's wages; sufficient left for the purchase of spirit and other little articles, but nothing for buying specimens; these are increased by donations;

£500 a year would put museum on a proper footing; has to ask the *Senatus* every four or five years for means of purchasing glass, 2309-2315; museum is the property of the University; contains many thousand specimens, many are not exhibited for want of room, 2315-2318; the catalogue is in MS.; when the collection is arranged in new premises, a printed one will be prepared, 2318, 2319; the most valuable part of the collection is the pathological and comparative; it is intended to enlarge the comparative very much, 2320-2323; it would be useful to Professor of Natural History, because in the Museum of Science and Art there are no anatomical specimens except skeletons, 2323, 2324; Anatomical Museum has a large stock of specimens illustrative of viscera, vascular system, etc.; few skeletons; quantities stowed away in boxes, 2325, 2326; under the old arrangement, the Natural History professor was keeper of Natural History Museum; could make it one of Comparative Anatomy, so far as he required it; now the Science and Art Department have appointed another keeper, and if the professor be excluded, will provide him with the means of a teaching collection, 2328-2332; there ought to be a collection expressly for teaching purposes, but desirable also to have a great museum to refer to, 2332; if there is a good catalogue, and room to move about, it is better not to have specimens brought into the lecture room, 2333; witness hopes to have the specimens specially arranged for students in comparative series, that they may work along the cases with catalogues or text-books, 2334; certain specimens are not allowed to be removed from the shelves for fear of injury, 2335; the curatorship has always been an appendage to the Anatomical chair, not a separate appointment, 2338, 2339.

Witness refers to the recommendations of the Duke of Devonshire's Commission, that the resources of the Edinburgh University being comparatively small, assistance should be given both in the form of a capital sum for extension, and an annual grant for assistance and apparatus; should also revise the salaries of Scientific professors, having regard to disparity of endowments and income from fees, 2339; substantially,

the needs are as they were in 1872; the three points are, buildings, assistants, and appliances, 2345, 2346.

Emoluments of professors.—Witness asks for no substantial addition to his; Anatomy ought to produce a good income from fees, but there should be better provision for expenses, 2347; all the other Medical professors feel that their chairs ought to be better endowed, but there is an important distinction; five are not engaged in practice, emoluments depend solely on professorships; seven others are practitioners, better for being so, 2349-2353; there ought to be some difference between the endowments of these two classes; there is now a difference of about £100 a year, 2353, 2354; witness would put in a claim for Anatomy to secure a minimum income to professor, the amount of fees being liable to fluctuations, 2355, 2356; some have recommended that the examination in Anatomy should be taken before the third session, if so, professor would lose the fees of third winter, 2356; apart from personal interests, does not think the change desirable, 2357; Anatomy is a fundamental subject; can be studied only under a licensed teacher, and in a licensed place; if student does not acquire a knowledge of it during Medical curriculum he remains ignorant; it is advisable that the time given should be long enough for acquiring and digesting the details; two years are not sufficient, considering the other subjects on hand; besides, the supply of material sometimes partly fails, prevents a student from dissecting as much as he ought; some object, that student ought not to be in anatomical and hospital training at the same time; witness approves of the simultaneous study; in 1870 the General Medical Council inquired into the subject, and found most of the anatomical teachers against changing the examination; no doubt the instruction of a student in Human Anatomy would be facilitated by previous training in the dissection of animals; but students would not care for a supply of dogs in dissecting room, 2359-2365; earlier anatomical examination has been tried by the English College of Surgeons; 50 per cent. of the candidates are rejected; the sense of shame is lost; not improbably 50 per cent. of witness' students would fail at the same ex-

amination, if at the end of second year, 2365, 2366; all the leading teachers in the country signed against the change, 2368; London University also examines at the end of second year; above 25 per cent. were rejected during five years, and these were not ordinary students, but picked men; all inferior ones weeded out by previous examination, 2369; the eminence of the Edinburgh Medical School is greatly due to the thoroughness of Anatomical training and testing; the late Professor Syme laid great stress upon it, 2372; if three sessions were given to Anatomy, and the curriculum prolonged accordingly, it might be desirable that the student's whole mind should be given to practical subjects for the last two years, 2375, 2376; the Medical Faculty have recommended students not to appear for examination till they have dissected the human body at least once; if this were made imperative, it might meet much of the difficulty, 2377.

About £400 of witness' gross income goes for class expenses, besides the £200 allowed from the fund, 2381-2385; expenses may be £100 a year more in the new building, 2385, 2386; in Edinburgh the fees are four guineas for the first course in each subject, three for the second, also three for Practical Anatomy; if student attends both Anatomical Lectures and Practice in the same term he pays seven guineas, 2387, 2398, 2399; in Glasgow and Aberdeen the lecture fee is three guineas, Practical Anatomy two guineas; these rates were fixed about seventy years ago, 2390, 2391; there is much more instruction now for the money, 2393-2398; Senatus recommends increasing the Arts and Theological fees in Edinburgh, not the Medical, 2392; there is preliminary examination before student enters on Medical course; witness suggests that Natural Philosophy should be made a more prominent part of it, rather than be introduced in the first professional examination; students come from all parts of the world, and part of the course they have attended counts for attendance in Edinburgh; if they have not attended Natural Philosophy, as is most likely, they are thrown back on a class belonging to first year studies, 2401; witness considers Natural Philosophy a secondary,

not fundamental subject; if put into the preliminary, student may get his knowledge by reading or otherwise, but if a subject of professional examination he must attend a course of lectures, 2402, 2403; arguments and reasons, 2404-2416.

Retiring allowances. — Has not thought particularly about it; his time has not come, 2416-2423.

New professorships and lectureships. — The professional authorities are generally agreed that the arrangements of *Materia Medica* should be changed; the teaching of Pharmacy and Therapeutics separated; the former taken at an early, the latter at a later period of the curriculum; is in favour of the change, 2423, 2424; thinks the curriculum might be lightened in the direction of Pharmacy; not so necessary since compounding is chiefly in the hands of druggists, 2425-2433; Therapeutics teaching would replace the present *Materia Medica*; Pharmacy instruction would be mainly practical, 2433; thinks it would be advantageous to have a distinct professorship of Clinical Medicine, 2436; bedside teaching should not be limited to Clinical professor, though he should give the course of lectures, as in Clinical Surgery, 2437; there is no new professorship wanted; important if the chair of General Pathology could be more closely connected with the Pathological department in the Royal Infirmary; the professor should be pathologist to the University wards, 2441; wishes to suggest a revision of graduation fees; the fee for M.A. is only three guineas; it might be made five guineas, and the fee for examination in each of the three departments, if taken separately, two guineas instead of one guinea, 2447; this would bring about £200 a year more to the University Fund, 2448; for the degree of M.B. three examinations cost five guineas each, and for O.M. five guineas more; something might be added, 2450; M.D. costs thirty-five guineas, 2452; not many go on to that; English diplomas cost more; Edinburgh Colleges are about to make theirs equal to the University M.B. and C.M.; thinks University fee should be raised to £25, 2453; prior to the former Commission the examination fees in Medicine were divided among the Medical professors; now they are

paid into the General University Fund, and small salaries given in lieu of them, 2455; prior to that Commission there were no examiners in Clinical Medicine, and no provision has been made for paying examiners; Professor of Anatomy receives no payment for examination work; University Court requires an examiner to remunerate his substitute, if he cannot be present himself; rather hard to pay another for doing what he himself is not paid for, 2456; non-professorial examiners should be paid out of the public funds; Queen's University, Ireland, received £1995 last year for examiners, London University £5186, 2459; graduation day is fixed by Ordinance for Edinburgh, 2460; it might be discretionary, as in Glasgow and Aberdeen, 2463; an Ordinance about candidates found unqualified is more stringent for Edinburgh than Glasgow and Aberdeen, where the examining board has power to determine what future chance may be given, 2463, 2464; some changes in the order of study made by Edinburgh University with consent of Privy Council, 2465; the degree of D.Sc. is given in Mental Science and Philology, in addition to other subjects; suggests it should be Doctor of Letters, and confine degrees in Science to Physical and Natural Sciences, 2468; in France they have Bachelors and Doctors of Letters; in Germany, Doctors of Philosophy, 2469, 2470; it would strengthen the position of Science degrees if the professors formed a separate Faculty; of late every new professorship not belonging to Medicine, Law, or Theology is put into the Arts Faculty, though it has nothing to do with teaching for the Arts degree, 2470-2473; it seems to lie within the province of the University to institute a new Faculty; University College, London, instituted a Faculty of Science, and its Calendar for 1870 has a statement of the reasons, 2472.

**Functions of General Council.**—Witness does not think it would be wise to give Council any executive power in the administration of University; is favourable to giving one or two additional representatives in University Court, 2476, 2477.

**Constitution of University Court.**—Believes Court is too small a body;

difficulty in obtaining a quorum, 2477; thinks the civic element should remain, 2478; is not a member of the Court, 2479; does not know of antagonism between Town Council assessors and others; the subdivision of Curatorial Court into civic and University sections has led to antagonism; suggests a third element, 2480; the Crown might cede its patronage to the Curatorial body on condition of appointing a certain proportion of that body, 2481; would not give a majority to any single party; if each of the three elements were represented by two persons it would make a good Curatorial Court, 2484, 2487; with reference to general administration, it lies now with the Senatus, which is likely to become too numerous for the work, 2487, 2488; worth considering whether an administrative body should not be elected by the different Faculties, 2489.

**Entrance examinations.**—Thinks an entrance examination in Arts Faculty would be productive of good, but should apply only to those who are proceeding to graduation; no one should be debarred from acquiring knowledge; that is the case in the Medical classes, 2492; amateur students might be allowed some means of passing into the other departments if they afterwards wished to graduate, 2494.

**Extra-mural teaching.**—The permission of this has been productive of the greatest good to the University; its extension to Arts training would be useful under certain conditions; the extra-mural teacher in Arts or Law should furnish the University Court with some evidence of his competence, 2495; it would be good evidence if a man had obtained M.A. with high honours, 2496; the number of recognised extra-mural teachers should have some limit; Edinburgh has now five in Surgery and four in Medicine, 2496.

**Entrance examination.**—Would not approve of a joint board appointed by all the Universities for entrance examinations; is not of opinion that we should strive after absolute uniformity; but there should be a minimum standard never departed from, that one University might not undersell the other; if non-professorial examiners were employed with the professors in Arts,

the neutral element ought to prevent depreciation of the standard, 2497-2500; would not consent to a joint board of examiners for degrees; it would interfere with the constitution of the Universities, 2501, 2502.

VEITCH, PROFESSOR, Glasgow. — Has been Professor of Logic in Glasgow University since 1864; was same at St. Andrews from 1860 to 1864, 9487, 9488.

Constitution and powers of University Court.—Thinks an increase of members desirable; sees no objection to General Council and Senate each sending up another member, making nine in all, 9489; would leave Senate free to elect either from their own body or not; in German Universities the governing body includes a Rector or pro-Rector, a curator, representing the Crown, and an ordinary professor from each of the four Faculties, 9490.

Election of University officers.—In 1868 witness proposed a scheme for a common body in Scotland to appoint University professors; hardly an election takes place in Glasgow apart from strong local influences; only drawback to this scheme is that it might lead to a common court both for appointment of professors and government of the Universities; not desirable; a common Curatorial Court might have three delegates from each University Court—delegates to choose a president *ab extra*, 9493-9497.

Functions of General Council.—Undesirable to extend its powers; would not give it more than powers of representation and recommendation; a good debate is sure to influence both Court and Senate; in 1874 a Bill was proposed 'to amend the Scottish Universities Act of 1858;' it proposed that three assessors, instead of one, should be elected by the Council; inexpedient and objectionable; there might be an arrangement for Council to send three assessors, each member voting for only two; Senatus sending two instead of one; there would be no compact party in the Court; the third man would probably represent the minority of the Council, 9500; the Court is too small in number, 9501; another provision in the proposed Bill was to give Council the power of meeting at any time on the

requisition of thirty members; objectionable; another proposal was that General Council might petition the Queen in Council to have its views carried into effect; would lead to constant conflict of opinion and jurisdiction, 9501; they might have power to petition Parliament, 9502; a power of adjournment from one day to another has also been suggested; a power of limitation is more wanted, 9505; has seen at ordinary meetings 100 to 150 present, 9508.

Course of study, etc.—Thinks any want not met by the present Arts system would be best remedied by other degrees, these degrees having a common basis in certain subjects of the Arts curriculum; these studies should be rather disciplinary than informational; would leave the present degree of M.A. to be taken by those who choose; the departmental principle has worked well, 9511; proposes a lower degree in Arts, B.A. or L.A. (Licentiate in Arts), also B.Sc., already instituted in Glasgow and Edinburgh; B.L. is also an important new degree; would not give the franchise to B.A.; already the principle of grounding new degrees on an Arts basis is recognised in Glasgow; several subjects in which the preliminary Medical examination is superficial; suggests for the common basis, junior Latin, Greek, and Mathematics, or one class in Natural Science, Logic, and Psychology; Logic should not be in the first year of the curriculum, 9512; might be taken as a compulsory subject after student had made his choice among the different branches, 9514, 9515; subjects for L.A. and B.A., 9515; degree to be taken at the end of second year after basis was laid, or preliminary examination passed, 9516-9519; L.A. preferable to B.A., 9519; it was a Glasgow degree for 300 years, 9520, 9521; would attach neither political or academic privilege to the lower degree, 9522-9525; subjects for M.A. with honours, 9524; alternative courses for B.Sc., 9525, 9526; does not suggest Modern Languages as a University subject, 9527; for M.B. or C.M., the common basis preferable to the present preliminary examination, which in Arts subjects is exceedingly perfunctory, 9528; recommends three honour

classes instead of two; remarks on honours examinations, 9530.

Entrance examinations.—Desirable there should be a line where school teaching ends and University teaching begins; difficulty is the disparity of attainments in those who come to University; would not enrol as a regular student one who did not come up to a certain standard, but allow him to join the class, or a tutorial one, and count the session to him if he came up to the standard of the senior class next session; this should apply only to Latin, Greek, and Mathematics; in a class of 236, witness has 80 not taking the Arts course, 9531; thinks the above more workable than examining only for admission to senior class, 9534; Blackstone examination, 9539.

New professorships.—Should be a chair of History and also of Political Economy, 9540; History to be alternative with some subjects for degrees and honours, 9541, 9542.

Assistants.—The only Arts classes left without assistance are English Literature, Logic, and Moral Philosophy; Logic professor has to go over 2034 written examinations and essays this session, besides lecturing; some assistance from the Clark scholar; should be direct provision for an assistant, 9543, 9544; about £50 a year would suffice, 9545; same for Moral Philosophy and Literature, 9546.

Length of sessions.—Does not think any material change desirable, 9551; continuous course better as a discipline than shorter terms, 9553; many students cannot afford to give up the whole year to University study, 9553; witness gives prizes in autumn for summer reading and essays; summer tutorial classes in Latin, Greek, and Mathematics might be held, but optional, 9554.

Extra-mural teaching.—Competitive extra-mural teaching in Arts would break up the present class system; arguments against it, 9557.

Election of professors.—Would abolish private patronage of chairs, 9559; none in Glasgow, 9560; would transfer such chairs to University Court, or an electing body for all the Universities; Rectors should be elected by majority of students, not nations, 9561; private patronage is only at St. Andrews in the case of three chairs, 9562–9564.

Emoluments of professors.—Too

low, especially in Arts and Law, where professors have no other employment, 9568; would be fair to raise the fees, because wages have risen, 9569; an increase of from £150 to £200 a year would be fair for professors' incomes; retiring allowances are regulated much like those of Civil Service; but professors are appointed much later in life; would allow them to retire at sixty on two-thirds, 9572; thinks the office of Principal very important, 9574; would give him more charge over financial affairs, which are more loosely managed by a body than a responsible individual; ought not to have professorial work, 9576.

Bursaries, etc.—Principle of competition good; nomination not very desirable; some valuable presentation bursaries in Glasgow, but subject to no power of examination, 9577, 9578; the names are intimated to the clerk of Senate, and published in the Calendar, 9580–9583; would not say there should be no presentations, but should be power of examination, 9583–9585; no objection to locality if wide enough, 9586; evil in Glasgow bursaries is, that they are given in first year, and for proficiency only in Classics; should be some mid-way in the curriculum; lapsed bursaries are generally given to Classics, 9587; there are four or five fellowships, rewards for higher studies, 9588.

Financial position.—Debt on Glasgow buildings, £44,000; no means of paying interest, 9589; origin was expenditure exceeding the estimate, 9590; also £24,000 promised to Western Infirmary, 9591, 9592; interest on debt is £2000; University pays £700 towards it, which ought to be for teaching purposes, 9593.

Theological Faculties.—Desirable there should be non-professional assistant examiners for B.D., 9595; thinks certain Theological chairs might be liberalised; no reason Hebrew professor more than Greek should belong to a particular Church, 9596; or a churchman at all, 9597; desirable to have a public chair of Church History, 9597.

WEBSTER, JOHN, Esq., Advocate in Aberdeen.—Has been Rector's assessor in the University Court of Aberdeen since its establishment under the Act of 1858; was appointed in 1860; is also a member of University Council, 3316–3319.

Constitution and powers of University Court.—Witness thinks it has answered its purpose admirably; has kept clear of conflict with either Council or Senatus; all parties are agreed that electing by nations, with Chancellor's casting vote, is objectionable; example of Chancellor giving it against the majority of students; little fear of a tie among 400 students, 3320–3323; there seems no legal provision for the death or resignation of Rector; Senatus should fix an early day for new election, 3323–3326; witness understands that Rector's and Chancellor's assessors have right to remain three years in office in any case; witness not aware of any difference of opinion, 3326–3331.

Functions of General Council.—Does not think it desirable to increase its representation in the Court; reason is the risk of local influence; there are 2400 members, but the numbers attending six last meetings have been from 31 to 69, chiefly ministers of the various churches in the district, 3330–3334; Council is prohibited from acting by committees, but does it; it elects Chancellor, and with Glasgow an M.P., besides an assessor in the Court; enough, 3334; strong objections in principle to the Chancellor having a veto on the decisions of the other University authorities, because he is not bound to hear parties or give any reasons, 3335; without his consent Court can make no proposal to Privy Council, or improve the internal arrangements under 12th section, 3336, 3337; there is much doubt and difference of opinion as to what is meant by 'internal arrangements,' 3338–3341; thinks Court ought to be empowered to act under 12th section without consent of Chancellor; some danger if University authorities could themselves make important changes affecting other interests, but does think there might be better tribunal than either Chancellor or Privy Council; the experience of Aberdeen has left the impression that in disputed matters Privy Council is very slow and very expensive; hears by counsel only, 3342, 3349–3352; University has to go to Privy Council about very small matters, such as changing a fee or giving £25 to each of two assistants instead of £50 to one, 3344–3349, and 3353–3359; witness does not know

that Aberdeen Court is a great deal more cautious and scrupulous than others in such matters; no power is given it to provide for the teaching of a class if a professor is invalidated, and to pay more or less from professor's means for a substitute; Court thinks it should; thinks also that Senatus should be bound to report a class being left untought during the whole or great part of a session; Aberdeen Senatus holds that Court cannot move in such matter *ex proprio motu*; further explanation of these difficulties, 3361–3375; if Court required professors to give in returns of attendance and other matters, it might bring up these points, 3375; thinks it would be no advantage to increase the representation of the Council in the Court, 3376, 3377; six a large enough number, 3378, 3379; does not see how Court can review decisions of Senatus under sec. 12 sub-sec. 1 *ex proprio motu*, 3380, 3381; Court has no official knowledge of Senate's proceedings; their decisions come before it only on appeal, 3382–3386; Court has acted as *ex proprio motu* under the 6th subsection; directed Senate not to engage in lawsuits or commit the funds to any considerable expenditure without consulting Court, 3386–3389; another doubtful question is the right to use University seal; Court requiring it, applied to Senatus, and got it at once; the question is whether it could have been demanded, 3388–3391.

Institution of new Faculties or degrees.—Witness has a strong opinion that no new degree in Arts is necessary; all students will go in for the M.A. degree, the endowments and prizes of the University being confined to that curriculum; Court decided that the true line of reform was instituting options in Modern Languages, Literature, and Science; Senatus and Council thought differently, 3391–3394, 3396; Council would have a B.A. degree, 3392; English Literature should be separated from Logic, 3397; witness thinks the alternative course would have to be open from the beginning; if Greek is excluded an entirely new course would be required, 3398; it is desirable to make it optional, but maintain Latin, which is a portal to everything, 3399–3402.

Entrance examinations.—Thinks them very desirable; Council and



Senatus have judged them unnecessary for Aberdeen; they think the bursary competition better, there being 220 bursaries for 350 students in Arts; but those that fail to obtain bursaries may not be fit to enter the classes, 3402; many do not compete, 3403; there is examination in passing from first class to second, 3404; is not afraid that many would be excluded by entrance examination, 3406; believes it is now very rare for men to come without any knowledge of Greek, 3407; reason is the excellence of primary schools in the north-east of Scotland, and the numerous bequests in favour of schoolmasters, 3408; cannot suppose there is such unpreparedness when 220 young men come forward yearly to the rigorous test examination in Aberdeen, 3409; from 40 to 50 bursaries are adjudged annually to first year students, 3411, 3412; amateur students should be admitted to Arts classes, and if afterwards found proficient, and wishing a degree, form should be waived, 3414; could not carry out entrance examination except in Latin, Greek, and Mathematics; suspects the professors do not like what is called protection from incompetent students, 3416.

New professorships.—If optional departments in M.A. curriculum are allowed, there will be need of teaching chairs in Modern Languages and Literature, especially the latter, 3418; Natural History requires to be divided; Zoology and Geology separated, 3418, 3419; Professor of Law has too little to do; has twenty-six students; teaches only Scotch Law and Conveyancing; should also teach Elements of Civil Law, and inform students of the main differences between English and Scotch law, 3420-3424; such lectures would probably be attended by others than Scotch Law students, 3424.

Length of session.—Winter session is already fully too long; Christmas vacation might be lengthened; summer should be used to make the curriculum three years instead of four, 3428; a month might be taken from winter session, and three months given to summer session, 3430; would not be hard on the professor; the Medical, Surgical, and Anatomical men teach in summer, 3431; Professor of Natural History teaches in Medical Faculty in summer, in Arts in winter, 3432; summer work could not be

done properly by assistants without professor, 3435; would not do to let the summer class be optional; the hardship to some would be balanced by the advantage of finishing the curriculum in three years, 3437; it is now possible to take M.A. in three years, if student is qualified to pass over the junior classes, but it is seldom done in Aberdeen, 3437, 3438; perhaps because of the bursaries being for four years; suggests that the money spread over four years might be given in three, 3439, 3440.

Finance.—The only point that presses itself upon witness as to the poverty of Aberdeen is about the library; very deficient in many important branches, 3441; also one great objection to the exclusion of Greek from Arts curriculum is the effect on professors' incomes, which would require compensation, 3441; the compensation grant to library is only £320 a year, half of what is given to other Universities, 3442; Museum is much too small, 3453; Professor of Natural History has a separate one for students, but the space is too limited; the whole of the College buildings are too small, 3454.

Extra-mural teaching.—Ventures no opinion, 3455.

WILSON, PROFESSOR, Edinburgh.—Has been twenty-two years Professor of Agriculture in Edinburgh University; is as professor a member of the Senatus; performs also the functions of Secretary to the Senatus and to the University, these offices being now combined; for the Senatus he has to keep minutes, attend meetings, and conduct correspondence; as Secretary to University, has charge of the business arrangements, matriculation, examinations, and degrees, checks and authorizes all disbursements, has control of the internal economy, management of servants, direction of repairs and alterations, 3792-3797; salary for the joint office, £250; thinks it was in 1867 that the offices were amalgamated, on account of some difference of opinion; Town Council thought they had the right of appointing University Secretary as formerly, 3807; has never been a member of University Court, but conducts the correspondence between it and the Senate, 3808, 3809.

Constitution and powers of University Court.—Personally, witness

would like one Court for the Scotch Universities, 3809; advantage would be uniformity of arrangements; the Universities are rivals, and often act in antagonism to each other; the Courts take the side of their respective Universities, 3811; would like to see rivalry as to quality of teaching, but not offering facilities by weaker examinations or lower fees, 3812; would like uniformity in examinations and fees; another advantage of one Court would be its removal from influences; matters submitted to it would be treated more on their intrinsic merits than where other considerations are liable to operate; decisions of University Courts should be beyond suspicion, 3816; Edinburgh has been brought into collision with the other three Universities about Medical degrees, 3818; there have been considerable differences as to the meaning of B.Sc., one taking a lower standard than the other; standards should be same throughout, 3819, 3820; with respect to discipline over professors, to see that they do their duty, the other three take a less active view of their duties than the Edinburgh Court does; they act chiefly as courts of appeal, 3821; suppose there were functions which should be exercised by each Court with regard to its own University, the desired uniformity might be secured by making all the Courts meet as a common Court for matters affecting the common interest, 3822; such subjects as the standard of degrees, and the meaning of the same degree should be brought before the common Court; this would be an improvement; but witness thinks it much more desirable to have but one Court for all; is not prepared to say who should exercise the functions of superintendence and discipline within each University, 3827; perhaps Edinburgh Court interferes too much and the others too little, 3829; for instance, in the appointment of assistants to professors and other minor matters, 3830; causes great dissatisfaction in the Senatus, 3831; there is a great deal of correspondence between Senatus and Court; great demand for returns; a great deal of time consumed; often much angry discussion produced, 3832-3834; if there was a General Court, none of the professors or principals should be upon it; it should be re-

moved from all individual prejudices and considerations; the members should be distinguished men, and could supplement their ignorance of teaching by calling experienced persons to their assistance, just as in this Commission, 3835-3839; would have a sufficient number of members to ensure a good attendance; would exclude the Senatus from representation, but not the General Council or the Rector; has not thought over the composition of the court in detail, 3840-3847; if the Courts continue separate, would eliminate the College element, and leave more management with the Senatus, 3847.

#### Functions of General Council.—

Has taken little interest; it is a farce altogether; difficult to get a meeting at all, and at every meeting the same two or three members speak to crotchets of their own, 3850-3860.

#### New Faculties and degrees.—

Would like to see Faculty of Arts split, leaving in it the Literary and Philosophical chairs, and placing all the others in a Faculty of Science; some would overlap, some do now, 3860; would like to see two chairs of Modern Languages,—one for the Teutonic, the other for the Latin tongues, 3861; there are preliminary examinations for Medicine and Law, much higher than an entrance examination would be, 3862-3867; would not mark that by any degree, 3867-3877; if a lower degree in Arts were required instead of preliminary examinations, the standard would require to be higher than the present preliminary, and would exclude many, 3878; moreover, for the preliminary, a man may acquire knowledge where he pleases, but for any degree he must attend classes, 3879; at present, students are freed from the preliminary by any B.A. degree, and by some other passes, 3880, 3881; does not know how a lower degree than M.A. would succeed; always recommends students to take M.A. before going into Medicine, 3883; but it is too much, which present preliminary is not, 3884; returns to suggestions about chairs and Faculties; Hebrew should be enlarged to include Semitic Languages; in Medical Faculty should be a teacher of Public Health, and one of Clinical Medicine; lecturers upon Ophthalmic, Aural, and Dental Surgery; would make at-

tendence on these optional, 3890-3893; would have the Hebrew chair belong both to Theological and Literary Faculties, 3893.

Extra-mural teaching.—Would like to see it in all the Faculties; thinks before recognising any teacher, Court should consult *Senatus*, 3896-3901.

Emoluments of professors.—Thinks no man ought to be appointed a professor without guaranteed emolument equivalent to his services; own chair is an extreme case; net remuneration for fourteen years was about £100 a year, 3901-3906; curriculum chairs must be attended by a certain number of students; outside ones are left to their own resources; the remedy is to refuse inadequate endowments, 3906-3913; own chair now worth £350, 3914; thinks no professor ought to have less than £600 from all sources, but would not have the whole sum guaranteed, 3915, 3916; chair of Technology existed for a year or two and was then discontinued, 3919.

WOOD, DR. ALEXANDER, Edinburgh.—Is M.D. of Edinburgh; as such a member of the General Council; was many years a member of the University Court, 10,008-10,007.

Constitution and powers of the University Court.—As a general rule, should be open, with power to close doors when necessary, 10,008-10,011; in witness' experience there was only once anything the public might not have heard, 10,011; the Medical Council sits in public; it is a very analogous body, having the regulation of all the Medical teaching in Great Britain, 10,015, 10,016; sees no objection to the *Senatus* sitting in public, except when individual character is dealt with, 10,017; when the public were first admitted to Medical Council, speeches were made to reporters rather than Council, but that passed away, and the publicity was a great improvement, 10,018; thinks General Council should have another representative in the Court; does not think it necessary to give *Senatus* another to balance it; *Senatus* is in itself powerful, 10,022; Curatorial Court different from University Court; very objectionable, because so little connected with the University, 10,024-10,027; when University Act was first passed, old graduates were greatly interested;

thought the Council was to be powerful for good; Mr. Gladstone knocked all these ideas out of their heads at one of the first meetings, and the interest ceased, 10,027; thinks Council should have power to pass resolutions, but these should not take effect till approved by the Court; it would be a much more serious matter for Court to reject a resolution passed than merely to decline attending to a recommendation, 10,028-10,031; this power would keep the old graduates interested in the University, 10,031; if there was anything really to do there would be good attendance; would not give proxies, 10,032-10,036; Mr. Gladstone told the members of Council in effect that they were a farce, that they had better not try to exercise power, for they had none, 10,039; the correctness of the opinion gave it effect, 10,040.

Course of study.—When Edinburgh increased a little its stringency about preliminary education, many students went to Glasgow, passed an easier examination, and returned to study, 10,044; Medical students, especially from England, are ignorant of general subjects to an extent scarcely supposed; an immense improvement in preliminary examination is the introduction of non-professorial examiners; preliminary should embrace the subjects of Arts course, but not so high as for M.A., 10,045-10,050; would not insist on Greek, but give choice of French or German, 10,046, 10,047; great want in Scotland is distinction between mere licence to practice medicine and the degree that stamps as University men, 10,050; preliminary examination should be conducted by Arts professors, with assessors travelling from one University to another, to secure that none falls below the standard, 10,051; if students intending a degree were obliged to attend some time in the Faculty of Arts, there might be diminution in the graduates, but not in the students; an M.D. should not only have medical knowledge, but the education of a gentleman; details, 10,053-10,061.

Extra-mural teaching.—Would like to have more; when witness was studying, there were many effete professors; students had to pay them the fees, but never thought of getting information from them, 10,061;

examples of advantages of extra-mural teaching; German M.D.'s get up classes for special subjects; this makes their Universities popular, 10,062; thinks something of the kind might be done here; and University Court might give students attending such classes a dispensation from attending professors, 10,063; that is, two or three special classes might be held equivalent to one of the professors' courses, 10,066; witness' idea is that there should be no limitation; that student should get his education where he likes, only from person approved by University, and should give proof under examination that he has been instructed, 10,068; it is a question whether a University ought to be both the teaching and the licensing body; would not like to see Scotch Universities like the London, graduating all comers without check on where they got their education; but if University has the power of saying what outside teachers are to be recognised, students would naturally take education within the University; underselling should not be allowed; this would be quite sufficient protection to professors, 10,069; examples of two or three courses of extra-mural lectures equivalent to one course within the University, 10,070-10,073.

**YOUNG, PROFESSOR, Glasgow.**—Has been Professor of Natural History since 1866; gave evidence before Science Commission in 1872; adheres to it, 1702-1707.

**University Court.**—Thinks its duties should be more explicitly defined, particularly in looking after the work of professors, 1707; would not grant further representation to the General Council; many professors are against it, 1712, 1713; would not alter functions of Council; it claims increased power, but has done nothing helpful, 1714.

**Course of study in Medicine.**—Medical Faculty are preparing to apply to Privy Council for modification of examinations; details, 1716-1719; more classes should be taken in summer, 1719; desirable to have more non-professorial Medical examiners, and circulate them through the Universities, to secure uniformity, 1722; in preliminary examination, desirable that there should be the option of taking French or German

instead of Greek; witness would give up Latin also for French and German, 1725, 1726; M.B. should have this option, but M.D. should be put on a much higher footing than it is as regards attainments, 1729; there is in Glasgow a Science degree overweighted with Arts classes; professors are anxious to give a certain divergence; plan, 1730; as preliminary, they would require Mathematics and Natural Philosophy, with two optional Arts classes; for D.Sc. they wish that M.A. be an essential preliminary, 1730; difficulty is that few students would take it, 1734.

**Entrance examination.**—It is proposed that there should be in Arts something like the preliminary in Medicine; that if not taken at the beginning it might be taken later, but with some delay in getting the degree; this to diminish the professorial labour in junior classes, 1736; meaning is, that if a man entered junior class without examination he should be considered a private student, a mere listener, not subject to close supervision, 1737; reasons, 1739.

**New professorships.**—Very much need of an addition in Pathology; course ought to be a demonstrative one; difficulty; better be a lectureship, unless Government would appoint a Professor of Pathology, and pay him a salary as Pathologist to the Infirmary, 1741; lecturers on Insanity and Ophthalmic Surgery desirable, 1742; Glasgow has chairs of Clinical Medicine and Clinical Surgery; additional teaching in Geology is wanted; still more a lecturer on Mineralogy and Mining; some of the professors, in addition to their ordinary work, ought to instruct in teaching, 1746; in Germany professors have these pædantic classes besides their ordinary ones, 1747.

**Assistance and apparatus.**—In several Scientific chairs there is no assistance except what professor himself provides; witness has spent about £50 of an endowment in paying students for giving demonstrative lectures; Professor of Botany needs a herbarium assistant; the relation to the Botanic Gardens is unsatisfactory, 1748; many years ago University gave a large sum to have access for teaching purposes, 1750; Gardens belong to shareholders, who would probably be willing to transfer them to the Crown; it is a struggle to keep them

up, 1751-1756; for Physiological Laboratory there is a room; has never been adequately fitted up; no assistant to undertake the details, 1756.

Length of University sessions.—Does not think any change desirable; would cut off many students from earning a livelihood; might commence in October and allow a longer interval at Christmas, 1757, 1758.

Extra-mural teaching.—Glasgow University recognises one teacher in the Andersonian, and two in the Infirmary school; would accept any others if suitable, 1759; students may, and do, attend unrecognised teachers, but those classes do not count toward degrees, 1761; there is a suggestion about allowing a system of *privat docenten*—higher graduates to teach intra-murally, and reckon a certain amount of their classes to count for a degree, 1762; in Arts the *privat docenten* system is the best step in the direction of non-professorial teaching; reasons, 1764, 1765.

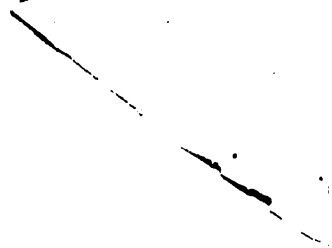
Election of officers.—Would like to see first year students excluded from electing Rector; it would be unpopular with them, but promote the peace and profit of the winter session, and save money to the political organizations of the city; important also to abolish the nations, 1766, 1767.

Buildings, museums, etc.—The Hunterian Museum has had a vast amount of donations, but some departments are at a standstill, or

retrograding, 1768-1772; the income destined for its maintenance went into the general building expenses; museum left dependent on the charity of professors; the £20,000 stated as the mercantile value of the coins ought not to have been reckoned by last Commission in assets of the University; the fund accruing from sale should be invested specially for the museum; last Commission recommended the transfer of the coins to some other public institution, on condition of a Government grant for the buildings, 1772-1776; they referred to this museum as a 'white elephant,' 1777; its maintenance costs from £210 to £250 a year, 1779; witness would recommend the sale of the coins to provide funds for the maintenance of the museum, but not to be put into the General University Fund, 1788; the coins are of no use for teaching purposes, 1786-1789.

Desirable to give female teachers some kind of University stamp; 67 per cent. of the teachers throughout the country are women; they pass above 20 per cent. higher than men in all departments, 1790; witness fears that his colleagues would be against giving them University instruction, but some would consent to a degree or certificate, 1792.

Witness thinks the term Faculty should be abolished; Faculties are now simply sub-committees, and the name tempts them to act as independent bodies, 1792.



REPORT  
OF  
THE ROYAL COMMISSIONERS  
APPOINTED TO ENQUIRE INTO THE  
UNIVERSITIES OF SCOTLAND  
WITH  
EVIDENCE AND APPENDIX.

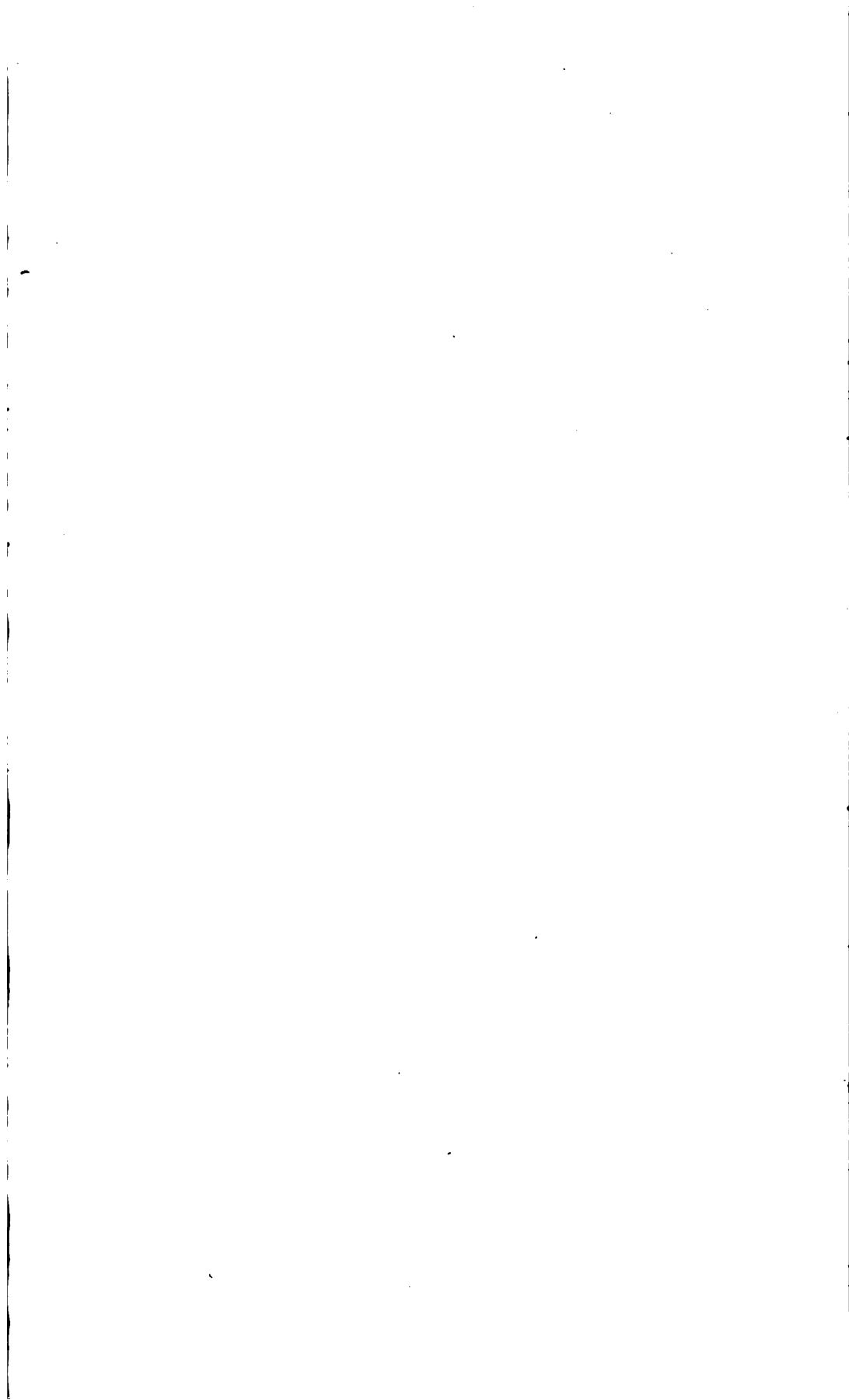
VOLUME I.

REPORT WITH INDEX OF EVIDENCE

*Presented to both Houses of Parliament by Command of Her Majesty*



EDINBURGH:  
PRINTED FOR HER MAJESTY'S STATIONER  
BY MURRAY AND G  
1878.







\_\_\_\_\_

\_\_\_\_\_



THE BORROWER WILL BE CHARGED  
THE COST OF OVERDUE NOTIFICATION  
IF THIS BOOK IS NOT RETURNED TO  
THE LIBRARY ON OR BEFORE THE LAST  
DATE STAMPED BELOW.

555436  
DEC 27 1976 H  
1977

BOOK DUE WID  
NOV 6 1978  
618452  
FEB 23 1979



Educ 3850.5  
Report of the royal commissioners a  
Widener Library 006561904



3 2044 079 755 534